

17 May 2024

General Manager,
Clarence Valley Council,
Locked Bag 23,
Grafton NSW 2460

Attention: James Hamilton

Development application No: 2023/0759
Proposed subdivision and childcare centre at James Creek Road, James Creek
Further Supporting Information

place
design
group.

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Creating
GREAT places

Dear Sir

We refer to the Additional information provided to Council by letter dated 14 May 2024. In addition, we provide the further information as follows:

- **Attachment 1** - Letter from NSW SES confirming the updated Flood Emergency Plan report has been reviewed and is accepted subject to minor variations.
- **Attachment 2** - Updated James Creek Flood Emergency Plan report from Water Engineering Plus. [updated to include SES minor variations.
- **Attachment 3** - Updated Statement of Landscape Intent from Place Design Group.
- **Attachment 4** - Updated Master Plan prepared by Rust Architecture.
- **Attachment 5** - Imagery of the proposed development which shows the James Creek frontage.

This material is to be considered as part of the requests for additional information. Should you have any enquiries please contact the writer.

Yours faithfully



Planning Principal
Place Design Group

Enc

Attachment 1 –Letter from NSW SES

Our Ref: ID2296-1

Your Ref:

14 May 2024

Martin Giles
Water Engineering Plus
6 Mayneview Street
Milton QLD 4064

email: mgiles@wep.com.au

CC: elena.palamara1@ses.nsw.gov.au

Dear Martin,

Flood Emergency Plan for The Village at James Creek

Thank you for forwarding the updated Flood Emergency Plan (FEP) for the proposed development at Lot 104 of DP751388 on James Creek Road known as The Village at James Creek on James Creek Road. We understand that the proposed development consists of a total of 280 residential lots and commercial areas comprising:

- 206 Residential R1 Zone lots;
- 74 Residential R3 Zone lots;
- 1 Childcare Centre; and
- 1 Commercial Centre.

The NSW SES has reviewed the proposed FEP and the flood risk information (e.g. Clarence Valley Local Flood Plan, Lower Clarence Flood Model Update 2022 etc.) available to the NSW SES. In summary we:

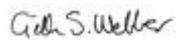
- **Recommend** amending 3.1.1 Regional Evacuation Centre page 11 – While the NSW SES warns for evacuation, **NSW Welfare Services** is the authority responsible for establishment of an Evacuation Centre.
- **Request** that references to ‘Evacuation Warning’, ‘Evacuation Order’ and ‘All Clear’ are removed. The Australian Warning System uses three categories of hazard warnings: Advice, Watch and Act, and Emergency Warning. These categories replace the previous terminology. Please note:
 - All warnings issued by the NSW SES are considered official warnings and will be viewed on the SES website and the HazardWatch website and app which was launched by the NSW SES on 30 September 2022 as part of the launch of the Australian Warning System. This new site is geared to displaying official NSW SES warnings and in time flash flood warnings and warnings from other emergency services.
 - Further information about the warning levels and actions can be found on the NSW SES website at <https://www.ses.nsw.gov.au/about-us/our-warnings/>

Further useful information can be found:

- NSW SES website <https://www.ses.nsw.gov.au/disaster-tabs-header/flood/>
- Emergency Business Continuity Plan (<http://www.sesemergencyplan.com.au/business/>)
- The Department of Climate Change, Energy, the Environment and Water website <https://www.environment.nsw.gov.au/research-and-publications/publications-search/floodplain-development-manual>

Please feel free to contact Suede Stanton-Drudy via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely

A handwritten signature in black ink that reads 'Gillian S. Webber'.

Gillian Webber

Coordinator Emergency Risk Management - Regional

NSW State Emergency Service

Attachment 2 – Updated James Creek Flood Emergency Plan



Water Engineering Plus Pty Ltd

The Village at James Creek - Flood Emergency Plan

Prepared for: MPD Investments Pty Ltd

Date: 17 May 2024

File Reference: R.30168.003 FEP



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1 Introduction

1.1 Background

The Village at James Creek is located at Lot 104 of DP751388 on James Creek Road. James Creek. The location of the development is shown on Figure 1-1.



Figure 1-1 Locality Plan (Clarence Valley Council Interactive Mapping System)

Existing ground levels are shown on Figure 1-2 (from Geolink drawing 3204/C102 Rev C).



Figure 1-2 Existing Contours and Zoning

With reference to the figure, existing ground levels over the site range from a minimum of about 4.5 m AHD in the south-eastern corner of the site to a maximum of about 21.5 m AHD in the highest point within the site.

The development site has a total area of about 33.47 ha.

Relevant plans of development for the site are included in Appendix A. The lot layout (Geolink Drawing 3204/C111 Rev C) is shown on Figure 1-3.



Figure 1-3 Lot Layout

As shown on the figure, the proposed development consists of a total of 280 residential lots and commercial areas:

- 206 Residential R1 Zone lots;
- 74 Residential R3 Zone lots;
- 1 Childcare Centre; and
- 1 Commercial Centre.

This report presents the Flood Emergency Plan (FEP) for the development.

Overall, although the site is above the level of the Probable Maximum Flood (or PMF, the largest flood event that could conceivably occur), to be consistent with the advice of NSW SES (8 March 2024), the Flood Emergency Plan the FEP focuses on evacuation to a nominated Evacuation Centre/ Assembly Point, with sheltering in place to be provided as a (non-preferred) option in the event that it is not possible to evacuate for any reason.

1.2 Clarence Valley Local Flood Plan

To facilitate the implementation of the FEP, the management of the site during a rare or extreme flood event is based on the requirements of the NSW SES *Clarence Valley Local Flood Plan*:

- Volume 1: *Clarence Valley Flood Emergency Sub Plan* (June 2017)
- Volume 2: *Hazard and Risk in Clarence Valley* (August 2017); and
- Volume 3: *SES Response Arrangements for Clarence Valley* (August 2017).

Given the location of the site, the arrangements for the Maclean Sector, as nominated in Chapter 2 of Volume 3 were considered. The key elements of the arrangements for the Maclean Section considered in the FEP include:

- Evacuation trigger based on the forecast level at the Bureau of Meteorology Maclean gauge (204410); and
- Evacuation trigger being the Maclean Showground buildings, Cameron Street, Maclean.

1.3 NSW SES

NSW SES reviewed the first and second versions of the Flood Emergency Plan, with the Plan amended in accordance with NSW SES recommendations to prepare this version of the report.

The comments provided by the NSW SES and the changes made to the Flood Emergency Plan are listed in Appendix B.

It is considered that as the recommendations of the NSW SES with respect to version 2 were minor and that all of the recommendations have been included in this version of the plan that the plan is satisfactory.

2 Description of Flooding

2.1 Flood Levels

The most recent regional flood modelling including the development site is presented in the BMT report *Lower Clarence Flood Model Update 2022* (Version 3, 31 August 2023) completed for Clarence Valley Council.

The study modelled the design flood events including 1 in 5 AEP, 1 in 20 AEP, 1 in 50 AEP, 1 in 100 AEP, 1 in 100 AEP for RCP4.5 climate, 1 in 100 AEP for RCP8.5 climate, 1 in 200 AEP, 1 in 500 AEP, and PMF events.

The mapping derived from the flood modelling described in the report, as presented in the Clarence Valley Council interactive mapping system, is shown in the following figures:

- Figure 2-1 Flood Levels, 1 in 100 Year;
- Figure 2-2 Flood Levels, 1 in 100 Year including climate changes (CC1); and
- Figure 2-3 Flood Levels, Probable Maximum Flood.

It can be noted that the CC1 climate change scenario includes a 12% increase in rainfall intensity (Page 3 of the BMT Report).

The figures indicate that the entire site is above the flood level for the 1 in 100 Year event including climate change, with some inundation of the south-western corner, and eastern side of the site during the PMF event.

The flood level to the east of the site is typically lower than the flood level to the west of the site. The peak flood levels applicable to the site are listed in Table 2-1.

Table 2-1 Peak Flood Levels (mAHD)

Case	West	East
1 in 100 Year	3.3	2.7
1 in 100 Year including climate change	3.9	3.3
PMF	8.2	7.4



Figure 2-1 Flood Levels, 1 in 100 Year



Figure 2-2 Flood Levels, 1 in 100 Year Including Climate Change

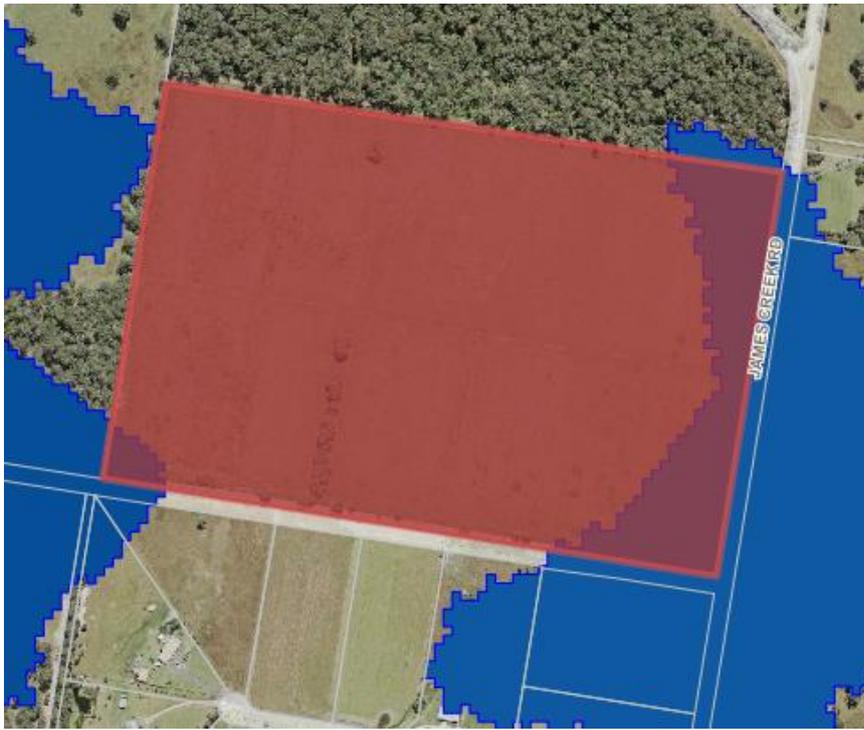


Figure 2-3 Flood Levels, Probable Maximum Flood

The extent of inundation of the developed site (prior to detailed design is shown on Figure 2-4 (based on Geolink Drawing 3204/C135 Rev C).

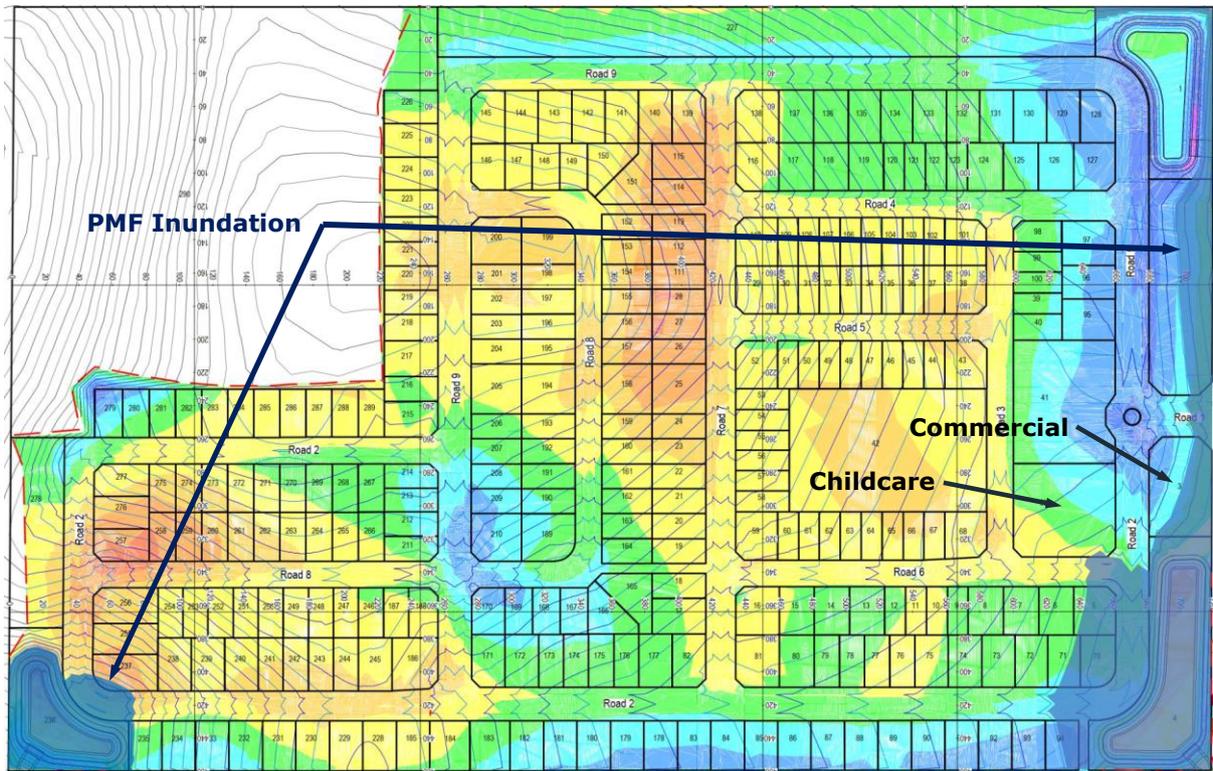


Figure 2-4 Site Inundation, PMF Event

Based on Figure 2-4, the preliminary design has some lots within the extent of the PMF.

It is noted that as part of final design, all residential and commercial lots will be set to achieve floor levels at or above the level of the PMF.

As a consequence:

- All residential floors will be above the level of the PMF;
- The Childcare Centre will be above the level of the PMF; and
- The Commercial Centre will be above the level of the PMF.

In relation to the Commercial Centre, it is envisaged that the centre will include a convenience store. By setting the level of the centre above the level of the PMF, residents of the development can access supplies if isolated by flood events greater than the 1 in 100 year event (refer Section 2.2).

2.2 Access

Access to the site is achieved via Gardiners Road/ James Creek Road. Gardiners Road to the south-west of the site is inundated by events in excess of the 1 in 5 flood event.

The location of the flood affected section of the road is shown on Figure 2-5.

Noting that Council is giving consideration to improving the immunity of the road to the 1 in 20 year flood event, as part of the development it is intended to further improve the immunity of the development and achieve immunity to the 1 in 100 year flood event and providing access to at least Townsend.



Figure 2-5 Access to Site

2.2.1 Timing of Flooding

Based on Council flood modelling results, the timing of flooding at Maclean Gauge and Gardiners Road are shown in Figure 2-6 to Figure 2-8 for the 1 in 100 AEP, 1 in 500 AEP and PMF events, respectively. Estimates of the time it takes to reach key flood heights pertinent to the Site are given below:

- During the 1 in 100 AEP flood event:
 - 58 hours to reach 3.3 m on Maclean gauge (levee overtopping level).
 - 93 hours to reach 3.26 m AHD (1 in 100 AEP flood level at Gardiners Road).
 - 54 hours to reach 2.8 m AHD (1 in 20 AEP flood level at Gardiners Road).
- During the 1 in 500 AEP flood event:
 - 50 hours to reach 3.3 m on Maclean gauge (levee overtopping level).
 - 56 hours to reach 3.26 m AHD (1 in 100 AEP flood level at Gardiners Road).
 - 43 hours to reach 2.8 m AHD (1 in 20 AEP flood level at Gardiners Road).
- During the PMF flood event:
 - 30 hours to reach 3.3 m on Maclean gauge (levee overtopping level).
 - 34 hours to reach 3.26 m AHD (1 in 100 AEP flood level at Gardiners Road).
 - 27 hours to reach 2.8 m AHD (1 in 20 AEP flood level at Gardiners Road).

Based on the timing of flooding discussed above, there will be sufficient warning times before the critical flood height of 3.3 m is reached on Maclean gauge (levee overtopping level) that will be used to set trigger levels for evacuation of the Site (refer to Section 3 for further details). Commentary on the timing of potential flooding of Gardiners Road is provided below:

- Gardiners Road (If upgraded to a 1 in 100 AEP immunity level) will be cut off several hours after the levee is overtopped, in the 1 in 100 AEP, 1 in 500 AEP and PMF events. For example, in an extreme (PMF) event, the road will be cut off approximately 4 hours after the levee was overtopped.

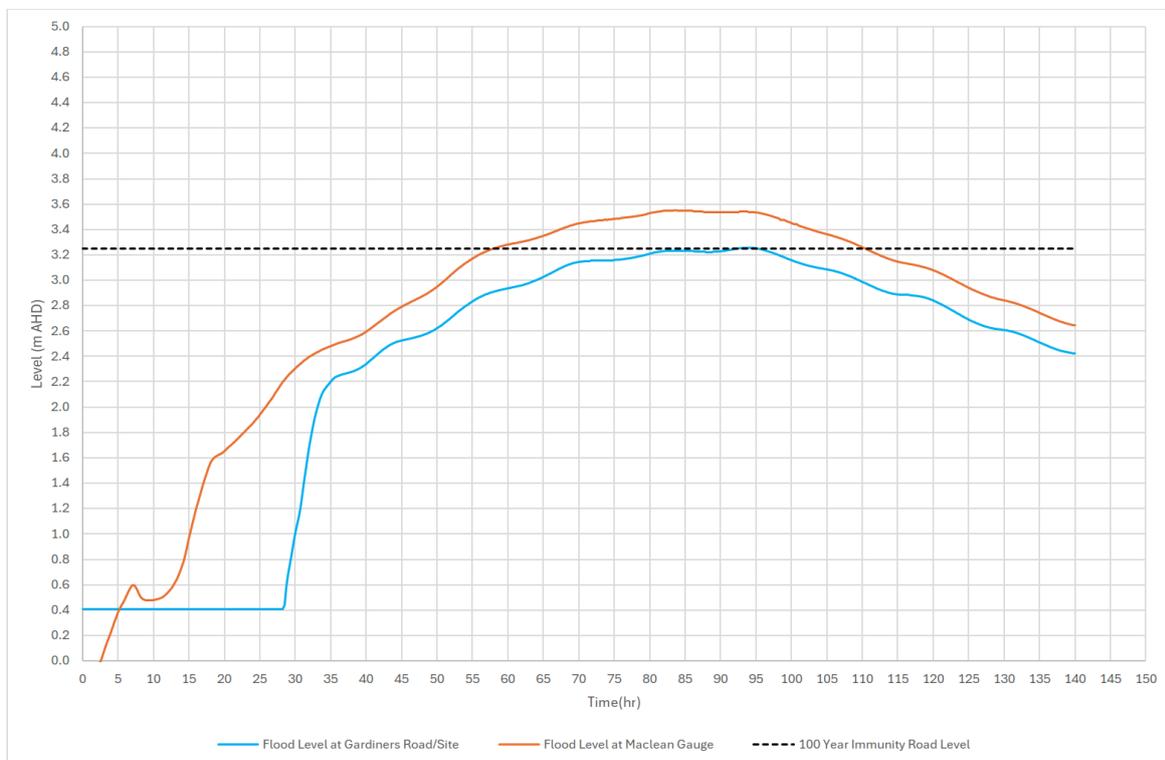


Figure 2-6 1 in 100 AEP Flood Level Hydrograph

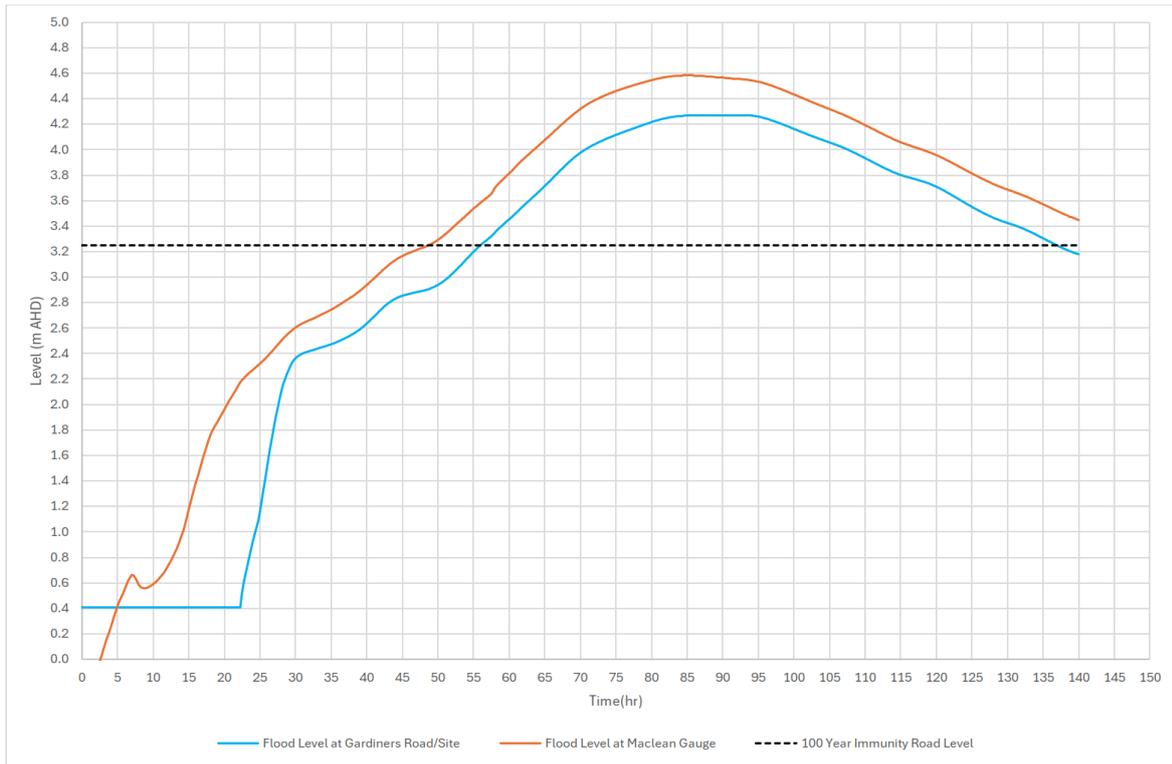


Figure 2-7 1 in 500 AEP Flood Level Hydrograph

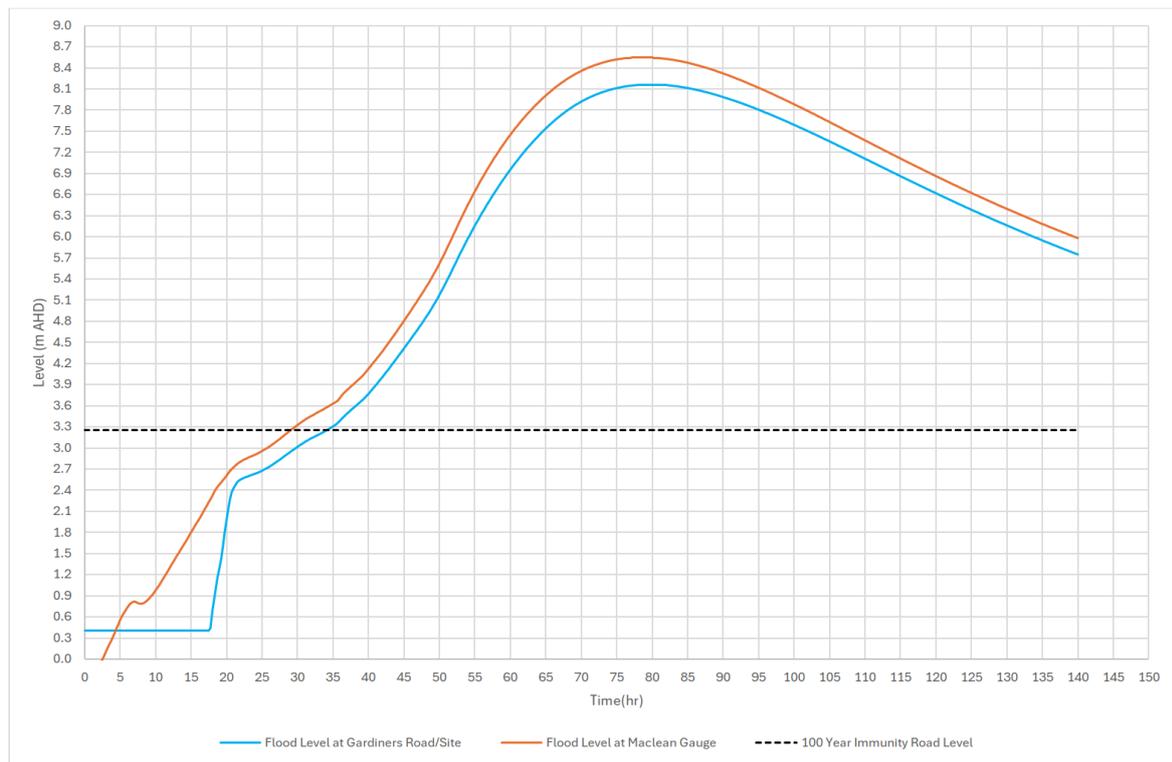


Figure 2-8 PMF Flood Level Hydrograph

2.2.2 Isolation Period

Development of the site will include upgrading Gardiners Road to the 1 in 100 year flood level. Although the site is above the level of the PMF it will be isolated for events in excess of the 1 in 100 year flood.

To provide guidance with respect to potential periods of isolation of the site, based on Council's flood modelling results the following can be noted.

In a 1 in 500 AEP event, Gardiners Road (If upgraded to have 1 in 100 AEP flood immunity) will be isolated for a period of about 80 hours.

2.3 Summary

Based on a review of available flood level information, the final design for the development will include the following:

- All residential and commercial (Childcare Centre and Commercial Centre) floors above the level of the PMF;
- All lots will be able to access the Commercial Centre; and
- When Gardiners Road is upgraded to a 1 in 100 AEP immunity level, isolation of the Site will only occur for events in excess of the 1 in 100-year flood event.

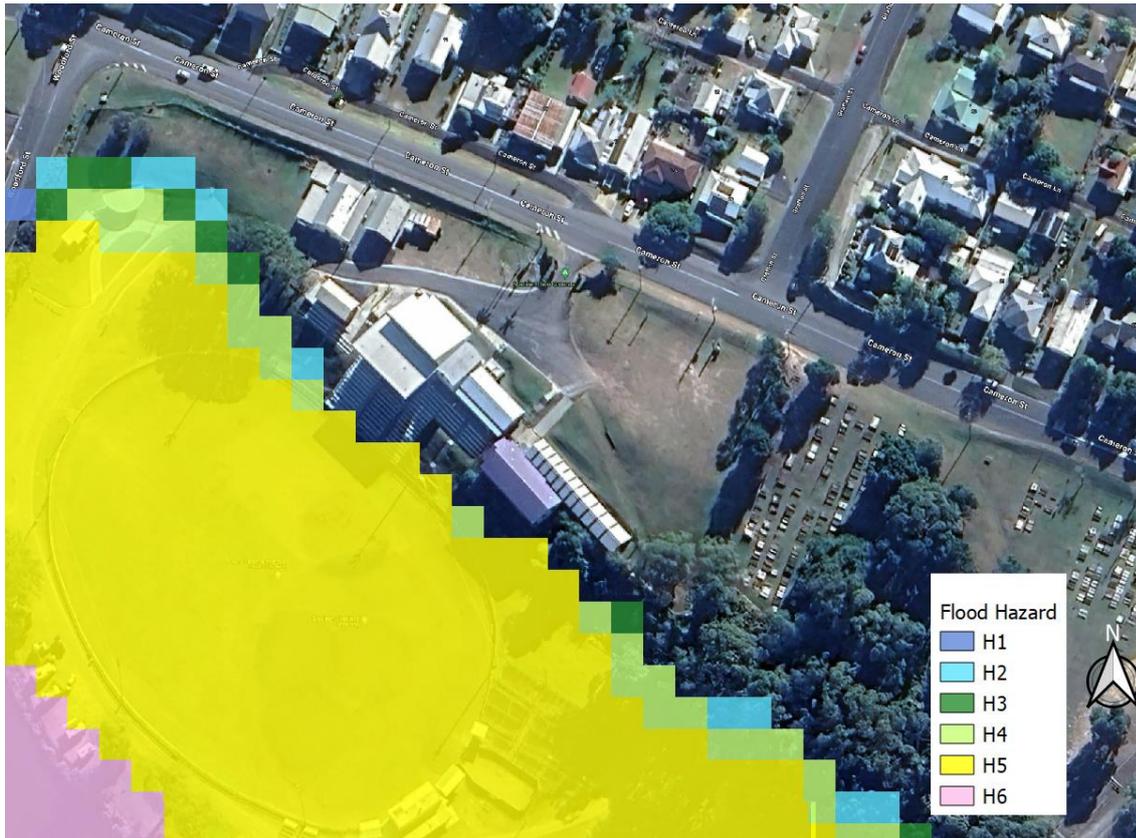


Figure 3-2 Flood Hazard Classification at Maclean Showgrounds in a 1 in 500 AEP Event

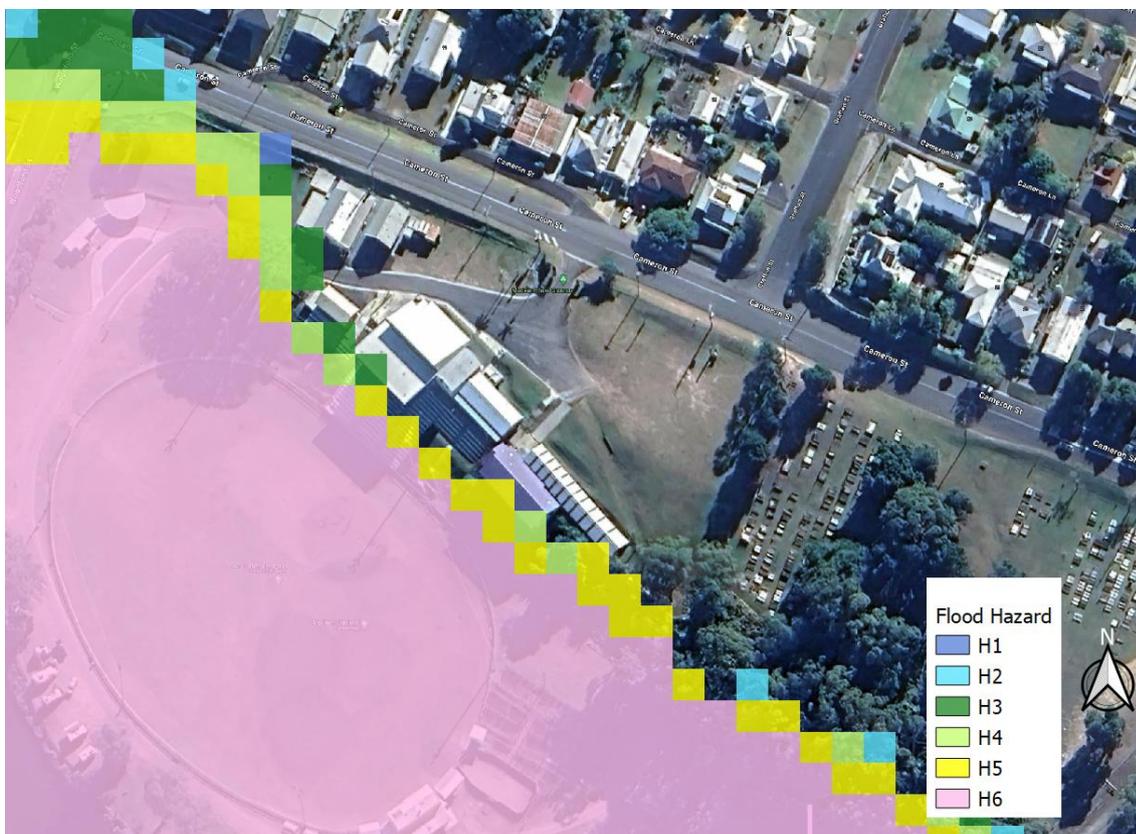


Figure 3-3 Flood Hazard Classification at Maclean Showgrounds in PMF Event

3.1.2 Method of Evacuation and Evacuation Route

The method of evacuation is self-evacuation by private transport before road closures. In this case, cars leaving the Site would drive south on James Creek Road, Gardiners Road (which is understood to be upgraded to a 1 in 100 AEP flood immunity level), Jubilee Street and finally Cameron Street, travelling approximately 7.5 km. The proposed evacuation route from the Site is shown in Figure 3-4.

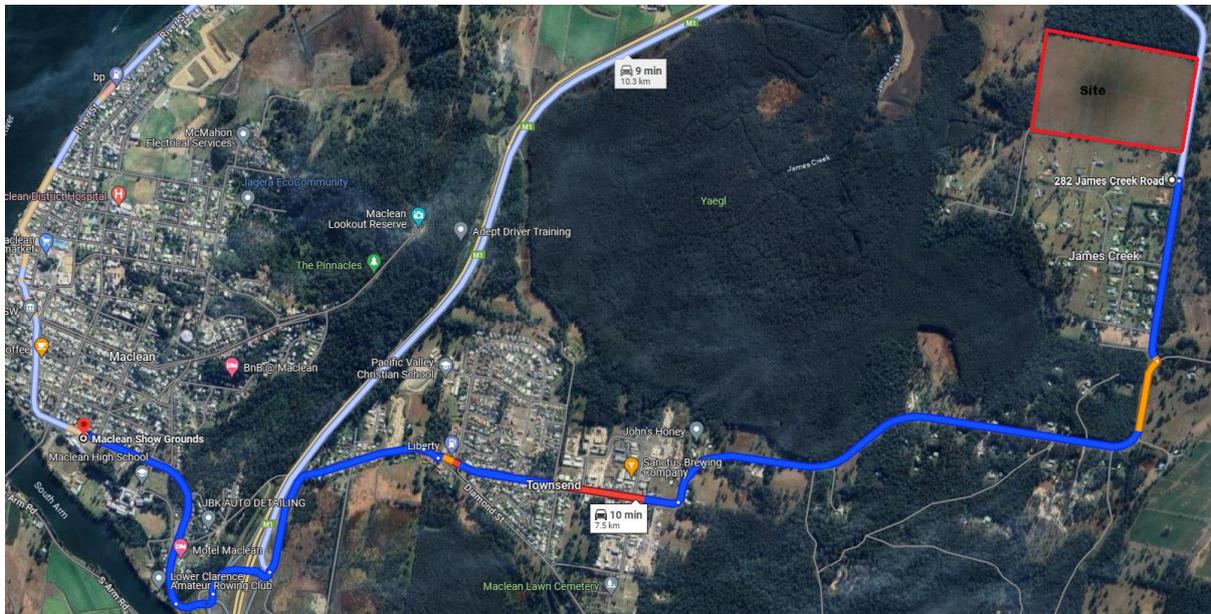


Figure 3-4 Proposed Evacuation Route

3.1.3 Warning System

The NSW SES uses the Australian Warning System (AWS) for flood warnings. The system comprises warning levels, action statements, hazard icons, colours and shapes. There are three levels within the AWS (namely, Advice, Watch & Act and Emergency Warning), as summarised below:

- **Advice** - an incident has started. Stay up to date in case the situation changes.
 - Stay informed.
 - Monitor conditions.
 - Reduced threat: return with caution.
- **Watch and Act** - conditions are changing and you need to start taking action now to protect you and your family.
 - Do not enter floodwater.
 - Prepare to evacuate.
 - Prepare to isolate.
 - Avoid the area.
- **Emergency Warning** - the highest level of warning. You may be in danger and need to take action immediately.
 - Evacuate now / Evacuate before [time].
 - Shelter now
 - Move to higher ground.

Figure 3-5 shows AWS hazard icons, colours and shapes.



Figure 3-5 AWS Hazard Icons, Colours and Shapes

Further information about the warning levels and actions can be found on the NSW SES website at <https://www.ses.nsw.gov.au/about-us/our-warnings/>. This new site is geared to displaying official NSW SES warnings and in time flash flood warnings and warnings from other emergency services. It is noted that warnings issued by the NSW SES are considered official warnings and will be viewed on the SES website and the HazardWatch website and the Hazards Near Me NSW App.

3.1.4 Evacuation Triggers

It is recommended to follow the Clarence Valley Local Flood Plan evacuation triggers to evacuate the Site. SES's key evacuation triggers are based on Bureau of Meteorology flood height predictions at the Maclean gauge (204410), as outlined below:

BOM key warnings: Minor (1.6 m), Moderate (2.2 m) and major (2.5 m)

Key evacuation triggers proposed for the Site:

- **Prediction to reach and/or exceed 3.0 m:** emergency Warning will be issued for residents of the Site to prepare to relocate to Maclean Showgrounds.
- **Prediction to reach 3.3 m:** begin evacuation of the Site to Maclean Showgrounds via the proposed evacuation route.

It is noted that based on the Lower Clarence River flood modelling results and BOM's prediction, there will be adequate flood warning time to prepare and evacuate the Site prior to the nominated trigger levels are reached on the Maclean gauge. Table 16 of the SES Local Plan summarises flood warning time available for various design flood events prior to the CBD levee is overtopped, as given below:

- Modelling suggests the Maclean Levee is overtopped around 3.4 m.
- It is estimated to take 48 hours in a 3.5m flood, 46.9 hours in a 3.7m flood and 30.4 hours in a 5.2 m event to overtop.

Note: It is noted that in a worst-case scenario, should residents start a late evacuation (i.e., after the trigger level of 3.3 m was reached), there will be a potential window of 4 hours to be able to evacuate before Gardiners Road is cut off (assuming the road would be upgraded to a 1 in 100 immunity level). After this time onwards, it is advised to stop further off-site evacuation and to shelter-in-place.

3.1.5 Home and Business Emergency Plans

3.1.5.1 Home Emergency Plan

To help households plan for flooding, The NSW SES has developed Home Emergency Plan (“HEP”) template that can be accessed online at <https://www.seshomeemergencyplan.com.au>. It will only take about 5 minutes to complete the template by entering one’s suburb or postcode to get started.

It is proposed that each resident will:

- Complete, share and practise the HEP with family and neighbours.
- Review HEP annually and after flood events.

For illustration purpose, a sample HEP has been completed and included in Appendix C of this FEP. A HEP will include the following key elements:

- **Preparation, such as:**
 - Preparation of HEP to document what do before, during and after a flood event.
 - Practicing and updating the HEP regularly.
 - Putting together an emergency kit that is suitable for each household needs.
 - Communication methods, such as radio stations
- **Action Before Emergency, such as:**
 - Responding to flood warnings by Bureau of Meteorology, such as Flood watch.
 - Responding evacuation by SES.

- **Action During Emergency, such as:**

A Flood Warning provides a predicted flood level on a river gauge and a time at which the river will reach that level. Flood advice, such as:

- Never drive, ride, or walk through floodwater.
 - Never play in floodwater.
 - Keep in contact with neighbours.
 - Be prepared to evacuate if advised.
- **Action After Emergency, such as:**
 - The NSW SES will advise when it is safe to return to an area that has been evacuated.
 - Do not enter flood affected roads or evacuation route back to the Site until an official advice has been issued by SES.

3.1.5.2 Emergency Business Continuity Plan

To help businesses plan for flood emergency, The NSW SES has developed Emergency Business Continuity Plan (“EBCP”) template that can be accessed online:

<https://www.sesemergencyplan.com.au/business/>

It will only take about 10 minutes to complete the template by entering one’s suburb or postcode to get started. It is proposed that each business will:

- Complete, share and practise an EBCP with family and neighbours.
- Review EBCP annually and after flood events.

The key steps how to make an EBCP online using the above website is summarised below.

- The Emergency Business Continuity Plan will ask you a few questions about where you work.
- These questions will help build a framework for your Emergency Business Continuity Plan.
- Select the most appropriate response and move through the steps to develop your Emergency Business continuity Plan.
- There are information icons throughout the steps to help you complete your plan.
- There are scenario icons throughout the plan to assist you in the type of information you will be required to complete your plan.
- At the end you can email your plan or download a PDF or Word file. By downloading a Word file, you can customise and edit your plan to suit your business situation.

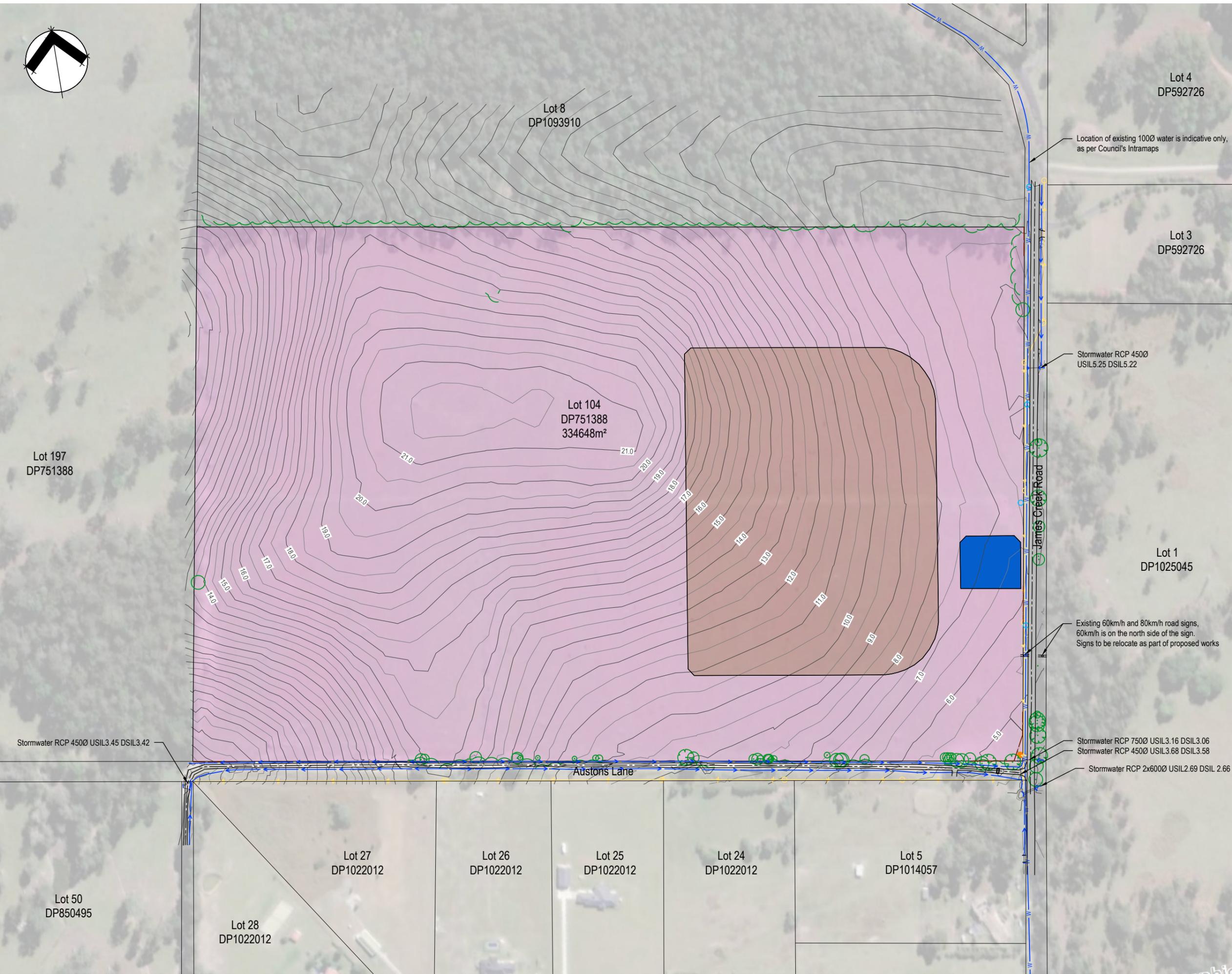
4 Conclusion

The Village at James Creek will involve the creation of residential and commercial lots with floors above the level of the PMF. Roadworks associated with the development will result in the site only being isolated in flood events larger than the 1 in 100-year event.

Based on the understanding of the flood behaviour and risk at the Site and within the floodplain, it is considered that the most appropriate strategy will be off-site evacuation to the Maclean Showgrounds by means of private transport to a suitable evacuation centre.

Notwithstanding, the proposed development is such that all residential floors, the childcare and commercial centres will be above the level of the PMF event, and this will provide a safe on-site shelter in place options if residents do not evacuate prior to losing access routes due to unforeseen circumstances. It is stressed that the intent is to evacuate, with shelter in place being a safe option in terms of flood risk in the last resort.

Appendix A Plans of Development



- LEGEND**
- Electricity and power pole
 - Tree line
 - Fire hydrant
 - Communication line and pit
 - Watermain (approximate)
 - Swale
 - R1 - General residential
 - R3 - Medium density residential
 - B1 - Neighbourhood centre
- Existing contours shown at 0.5m intervals

DEVELOPMENT APPLICATION

Rev.	Description	Date	Des.	App.	Chk.
C	Revised submission	10/11/2023	JLC	MVE	MVE
B	Drawing Schedule updated	13/04/2023	JLC	MVE	MVE
A	Updated to address Council's AIR	24/05/2022	JLC	MVE	MVE

Amendments

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quality solutions sustainable future

Project Title
James Creek Road Subdivision

Client
MPD Investments Pty Ltd

Designed	JLC	Drawn	JLC	Checked	
Approved	MVE	Date	8/10/2021	MVE	

XREFs

Scale

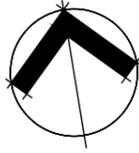
metres 0 15 30 45 60 75

Drawing Title
Existing Layout

3204-1129

Drawing Number *Revision*

3204/C102 **C**



LEGEND

	Stage 1A - 69 lots
	Stage 1B - 25 lots
	Stage 2 - 46 lots
	Stage 3 - 87 lots
	Stage 4 - 63 lots
	Road reserve widening (dedicated to Council)

Note: Lot 227 buffer is included with Stage 2 count. Residue lot included with Stage 4 lot count.

Note:
1. Stages shown are indicative only, and construction / release will be undertaken in sub-stages to be determined during detailed design.

DEVELOPMENT APPLICATION

Rev.	Description	Date	Des.	App.	Chk.
C	Revised submission	10/11/2023	JLC	MVE	MVE
B	Drawing Schedule updated	13/04/2023	JLC	MVE	MVE
A	Updated to address Council's AIR	24/05/2022	JLC	MVE	MVE

Amendments

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Project Title

James Creek Road Subdivision

Client

MPD Investments Pty Ltd

Designed	JLC	Drawn	JLC	Checked	
Approved	MVE	Date	8/10/2021	MVE	

XREFs

Scale
metres 0 12.5 25 37.5 50 62.5

Drawing Title

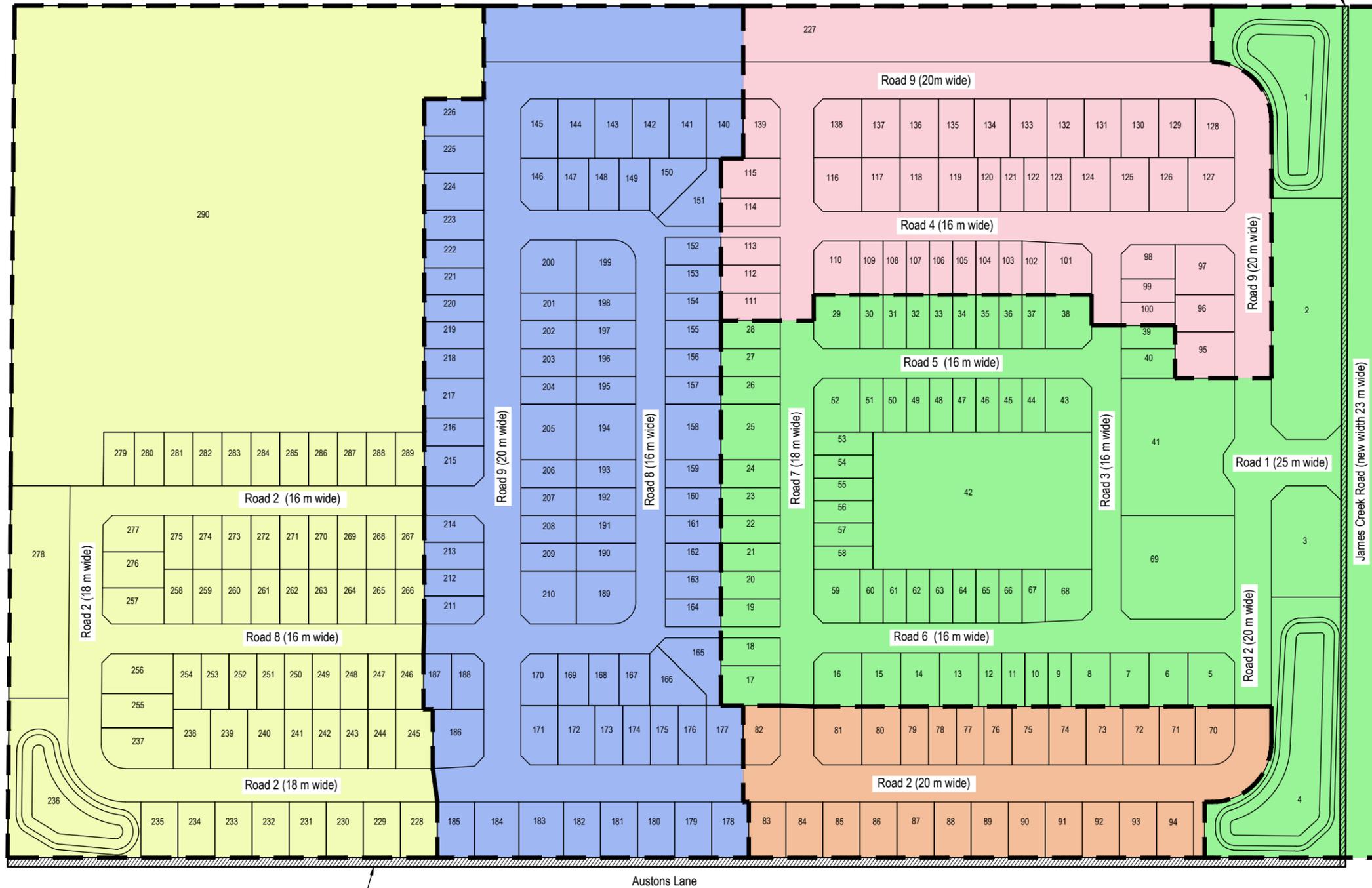
Staging Plan

3204-1130

Drawing Number Revision

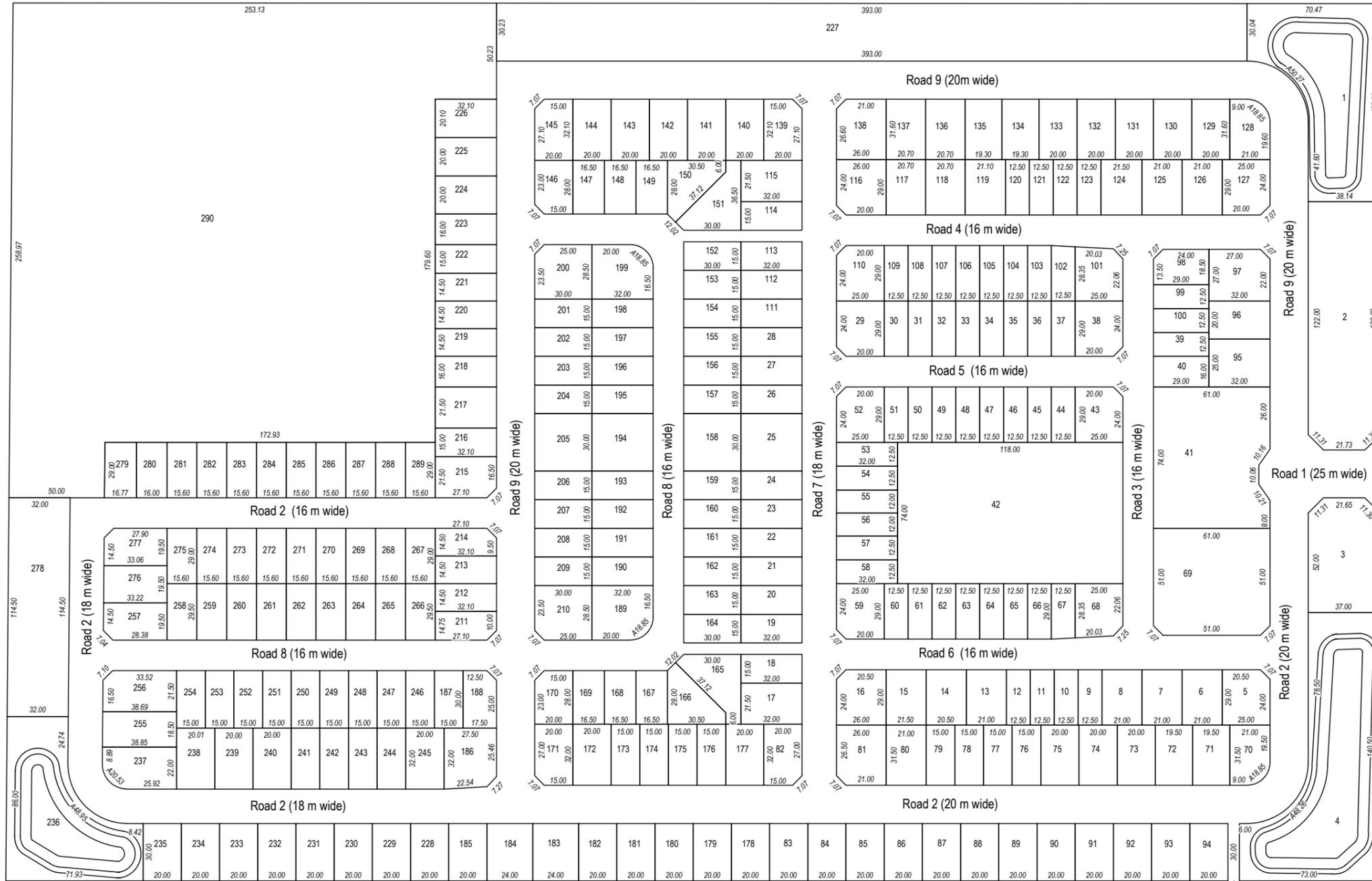
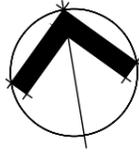
3204/C110

C



Strip of land 5.0 m wide from Lot 104 DP751388 to be dedicated to Council as road reserve.

Strip of land 3.0 m wide from Lot 104 DP751388 to be dedicated to Council as road reserve.



Austons Lane

Emergency access to Austons Lane

- Note:
- Duplicate dimensions are removed for clarity.
 - Dimensions shown are indicative only, subject to final setout by registered surveyor.

DEVELOPMENT APPLICATION

Rev.	Description	Date	Des.	App.	Chk.
C	Revised submission	10/11/2023	JLC	MVE	MVE
B	Drawing Schedule updated	13/04/2023	JLC	MVE	MVE
A	Updated to address Council's AIR	24/05/2022	JLC	MVE	MVE

Amendments

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quality solutions sustainable future

Project Title

James Creek Road Subdivision

Client

MPD Investments Pty Ltd

Designed	JLC	Drawn	JLC	Checked	
Approved	MVE	Date	8/10/2021	MVE	

XREFs



Drawing Title

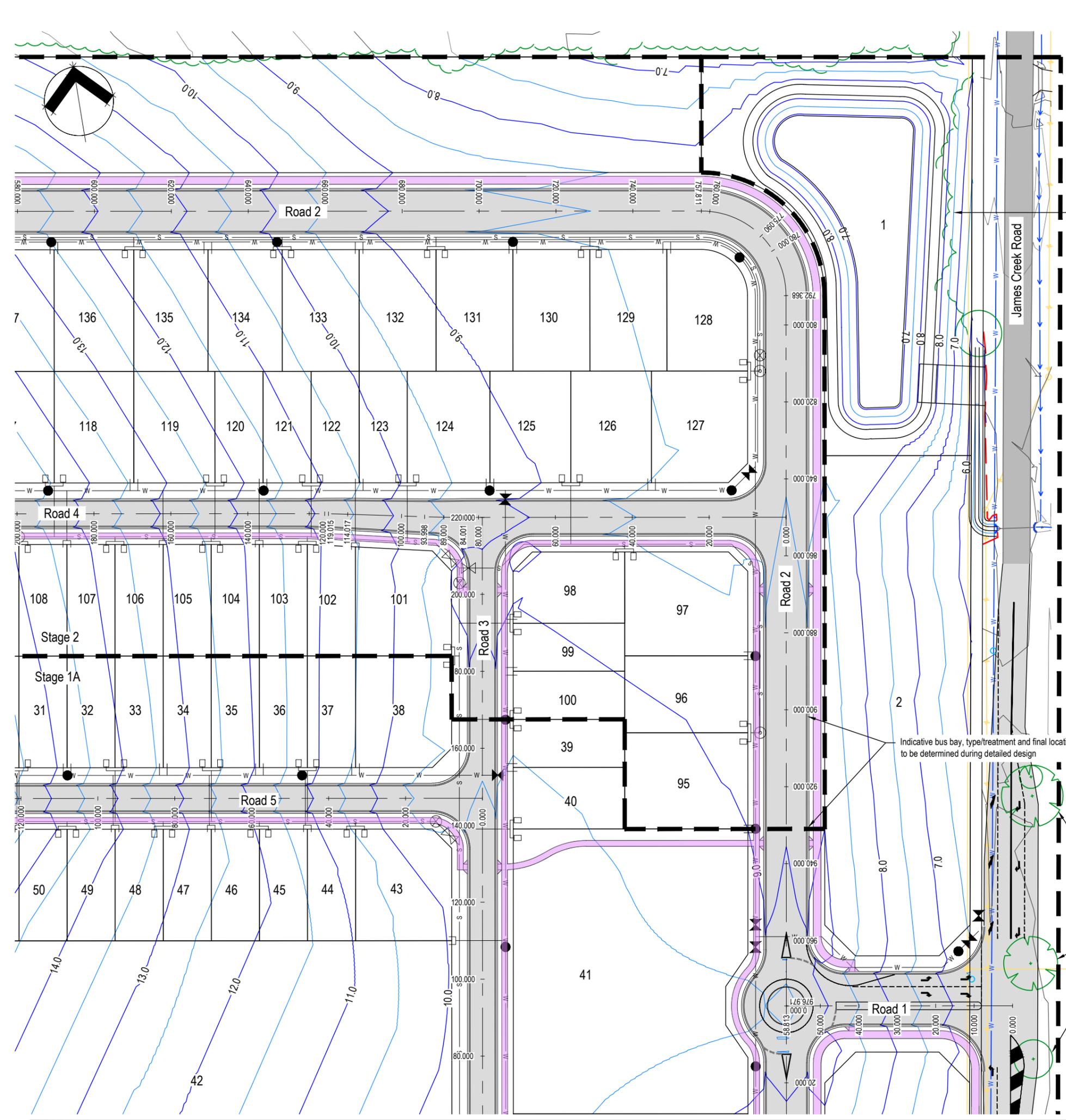
Lot Layout and Lot Dimensions

3204-1130

Drawing Number Revision

3204/C112

C



LEGEND (Existing)

- Electricity and power pole
- Tree line
- Fire hydrant
- Communication line and pit
- Watermain (approximate)
- Swale
- Road

LEGEND (Design)

- Road
- Footpath
- Water reticulation pipe
- Low pressure sewer main
- Sewer rising main
- Stage boundary
- Extent of works

Existing and design contours shown at 0.5 m intervals

Vegetation to be removed/retained depending on detailed design

Indicative bus bay, type/treatment and final location to be determined during detailed design

Trees to be removed

Existing electricity, telecommunications and water services to be relocated clear of the proposed intersection.

- Note:
- Fencing to be installed as per landscaping design, refer to plan set by others.
 - Stormwater pits and pipes not shown as locations will be determined as part of detailed design.
 - Stage boundaries are extent of works unless shown otherwise (refer to Legend).

DEVELOPMENT APPLICATION

Rev.	Description	Date	Des.	App.	Chk.
C	Review submission	10/11/2023	JLC	MVE	MVE
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Approved	MVE	Date	8/10/2021	MVE

XREFs

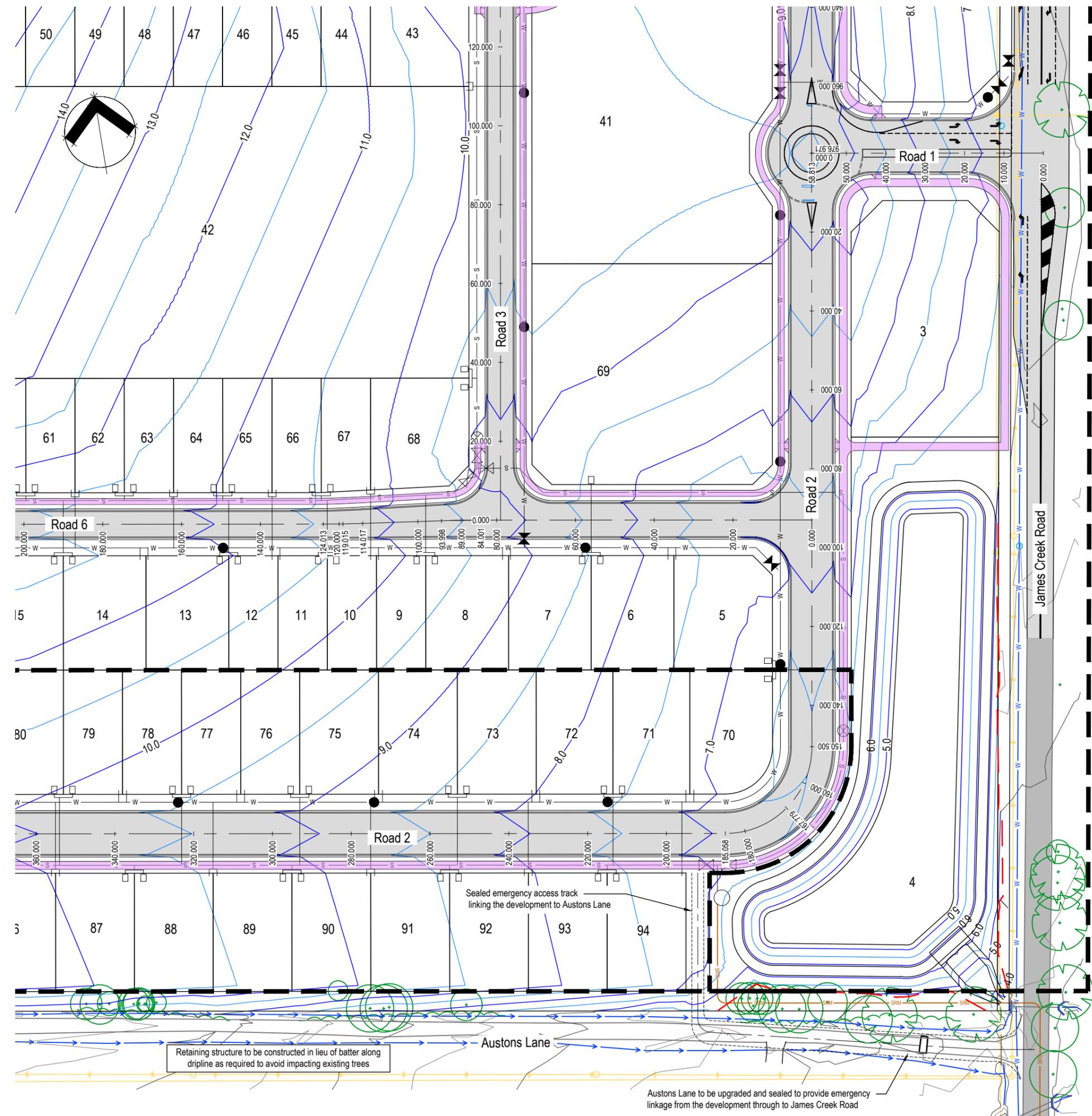
Scale

metres 0 5 10 15 20 25

Drawing Title
Design Layout Sheet 1 of 5

Drawing Number
3204/C122

Revision
C



LEGEND (Existing)

- Electricity and power pole
- Tree line
- Fire hydrant
- Communication line and pit
- Watermain (approximate)
- Swale
- Road

LEGEND (Design)

- Road
- Footpath
- Water reticulation pipe
- Low pressure sewer main
- Sewer rising main
- Stage boundary
- Extent of works

Existing and design contours shown at 0.5 m intervals

- Note:
- Fencing to be installed as per landscaping design, refer to plan set by others.
 - Stormwater pits and pipes not shown as locations will be determined as part of detailed design.
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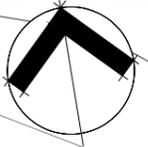
Project Title
James Creek Road Subdivision

Client
MPD Investments Pty Ltd

Designed	JLC	Drawn	JLC	Checked	
Approved	MVE	Date	8/10/2021	MVE	

XREFs

Scale
 metres 0 5 10 15 20 25



LEGEND (Existing)

- Electricity and power pole
- Tree line
- Fire hydrant
- Communication line and pit
- Watermain (approximate)
- Swale
- Road

LEGEND (Design)

- Road
 - Footpath
 - Water reticulation pipe
 - Low pressure sewer main
 - Sewer rising main
 - Stage boundary
 - Extent of works
- Existing and design contours shown at 0.5 m intervals

- Note:
1. Fencing to be installed as per landscaping design, refer to plan set by others.
 2. Stormwater pits and pipes not shown as locations will be determined as part of detailed design.
 3. Stage boundaries are extent of works unless shown otherwise (refer to Legend).

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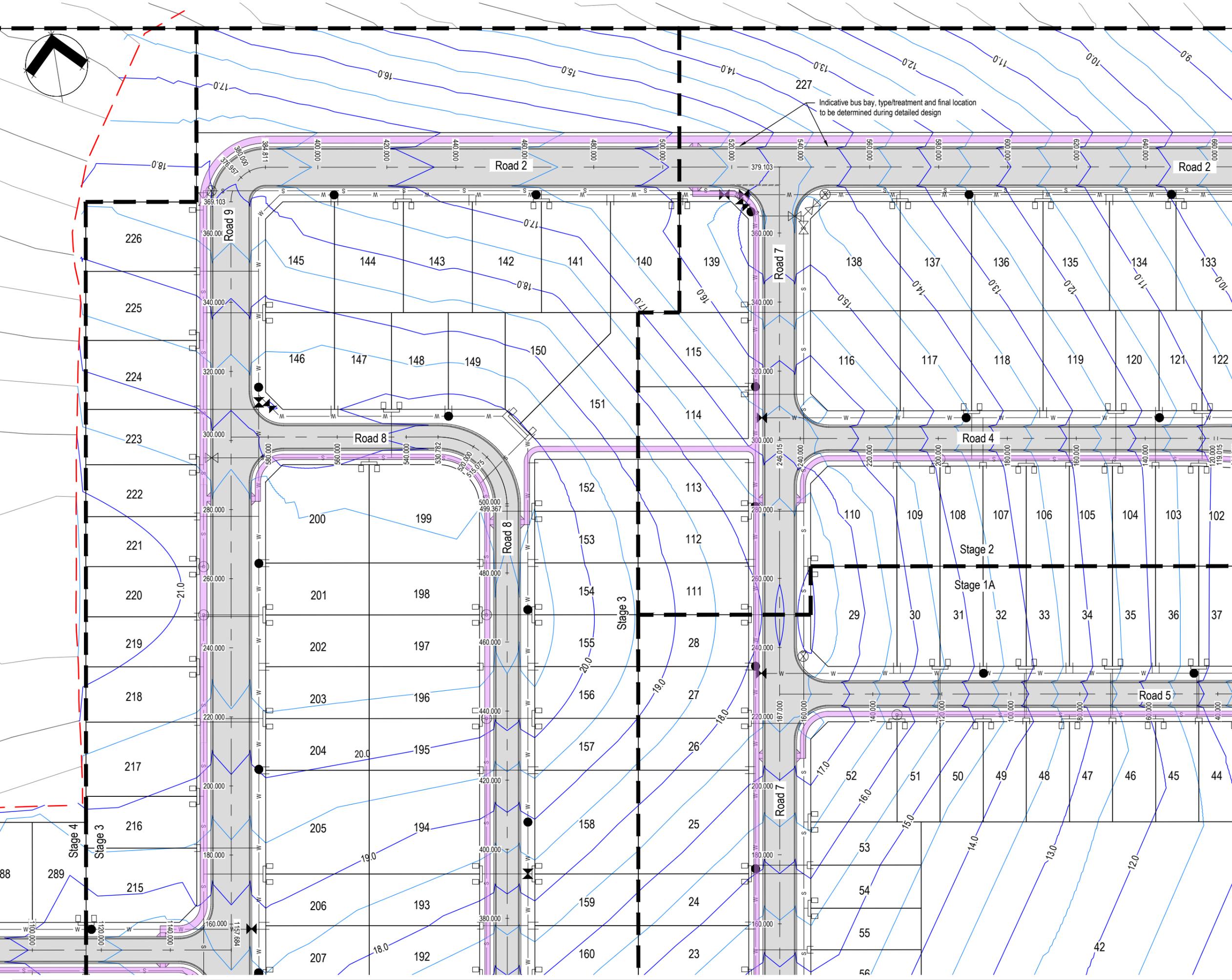
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James Creek Road Subdivision

Project Title		
James Creek Road Subdivision		
Client		
MPD Investments Pty Ltd		
Designed	JLC	Drawn
Approved	MVE	Date
		8/10/2021
Checked	JLC	MVE
XREFs		
Scale		
metres 0 5 10 15 20 25		





LEGEND (Existing)

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- Tree line
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- Watermain (approximate)
- Swale
- Road

LEGEND (Design)

- Road
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Existing and design contours shown at 0.5 m intervals

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Approved	MVE	Date	8/10/2021	MVE	

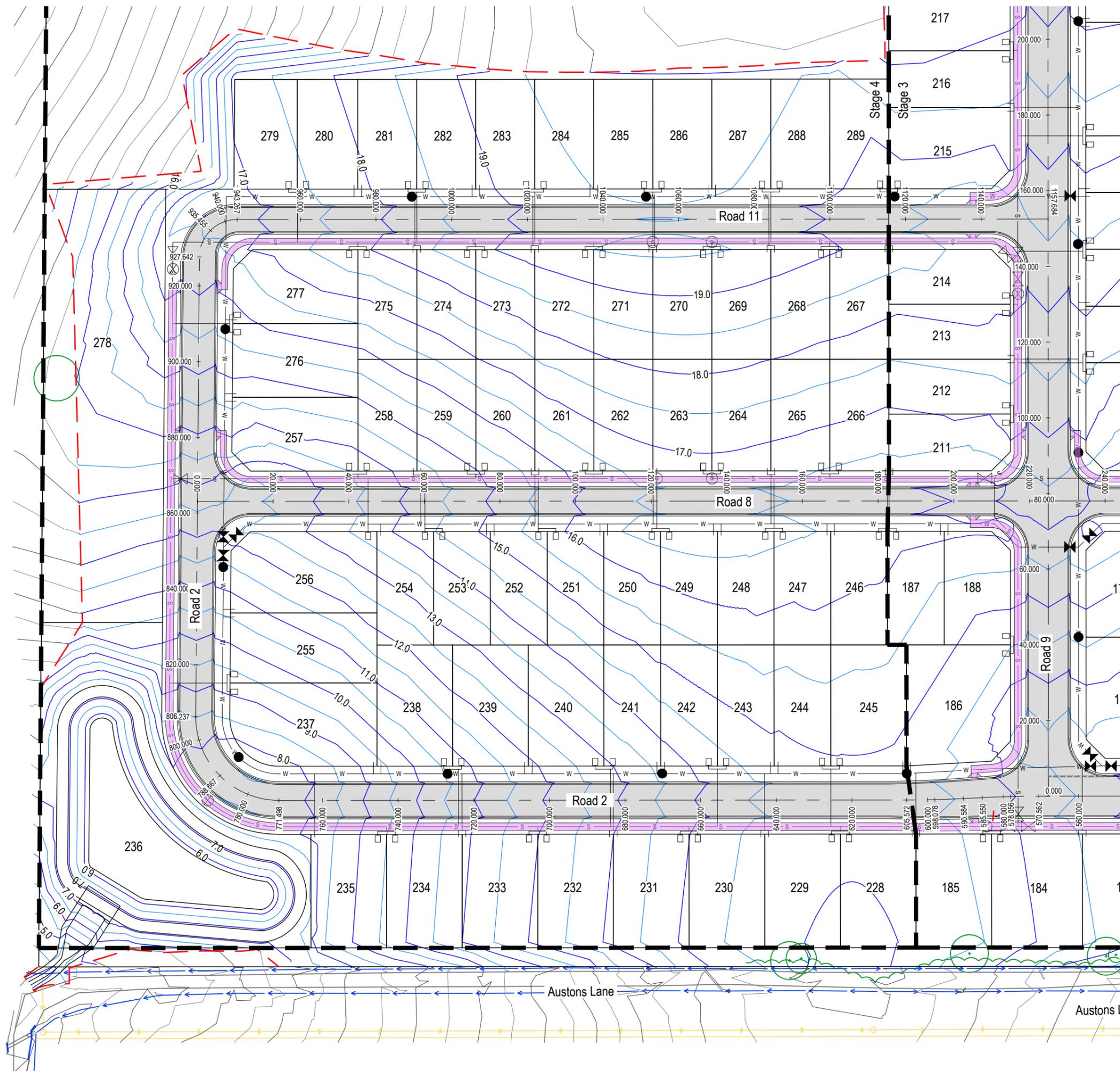
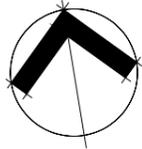
XREFs

Scale
 metres 0 5 10 15 20 25

Indicative bus bay, type/treatment and final location to be determined during detailed design

Retaining structure to be constructed in lieu of batter along dipline as required to avoid impacting existing trees

Austons Lane



LEGEND (Existing)

- Electricity and power pole
- Tree line
- Fire hydrant
- Communication line and pit
- Watermain (approximate)
- Swale
- Road

LEGEND (Design)

- Road
- Footpath
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- Sewer rising main
- Stage boundary
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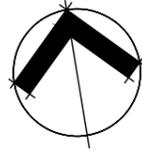
Client
MPD Investments Pty Ltd

Designed	Drawn	Checked
JLC	JLC	MVE

Approved: MVE Date: 8/10/2021

XREFs

Scale: metres 0 5 10 15 20 25



LEGEND

	Cut 2.4 m to 2.9 m
	Cut 1.8 m to 2.4 m
	Cut 1.2 m to 1.8 m
	Cut 0.6 m to 1.2 m
	Cut 0.0 m to 0.6 m
	Fill 0.0 m to 0.6 m
	Fill 0.6 m to 1.2 m
	Fill 1.2 m to 1.8 m
	Fill 1.8 m to 2.4 m
	Fill 2.4 m to 2.5 m
	Extent of works

Existing and design contours shown at 0.5 m intervals

- Note:
- Bulk earthworks shown is from the existing surface to the design surface.
 - Lot grading and retaining to be finalised with detailed design. Maximum height of walls will be 2.0 m.
 - Stage boundaries are extent of works unless shown otherwise (refer to Legend).

DEVELOPMENT APPLICATION

C	Revised submission	10/11/2023	JLC	MVE	MVE
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Rev.	Description	Date	Des.	App.	Chk.
<i>Amendments</i>					

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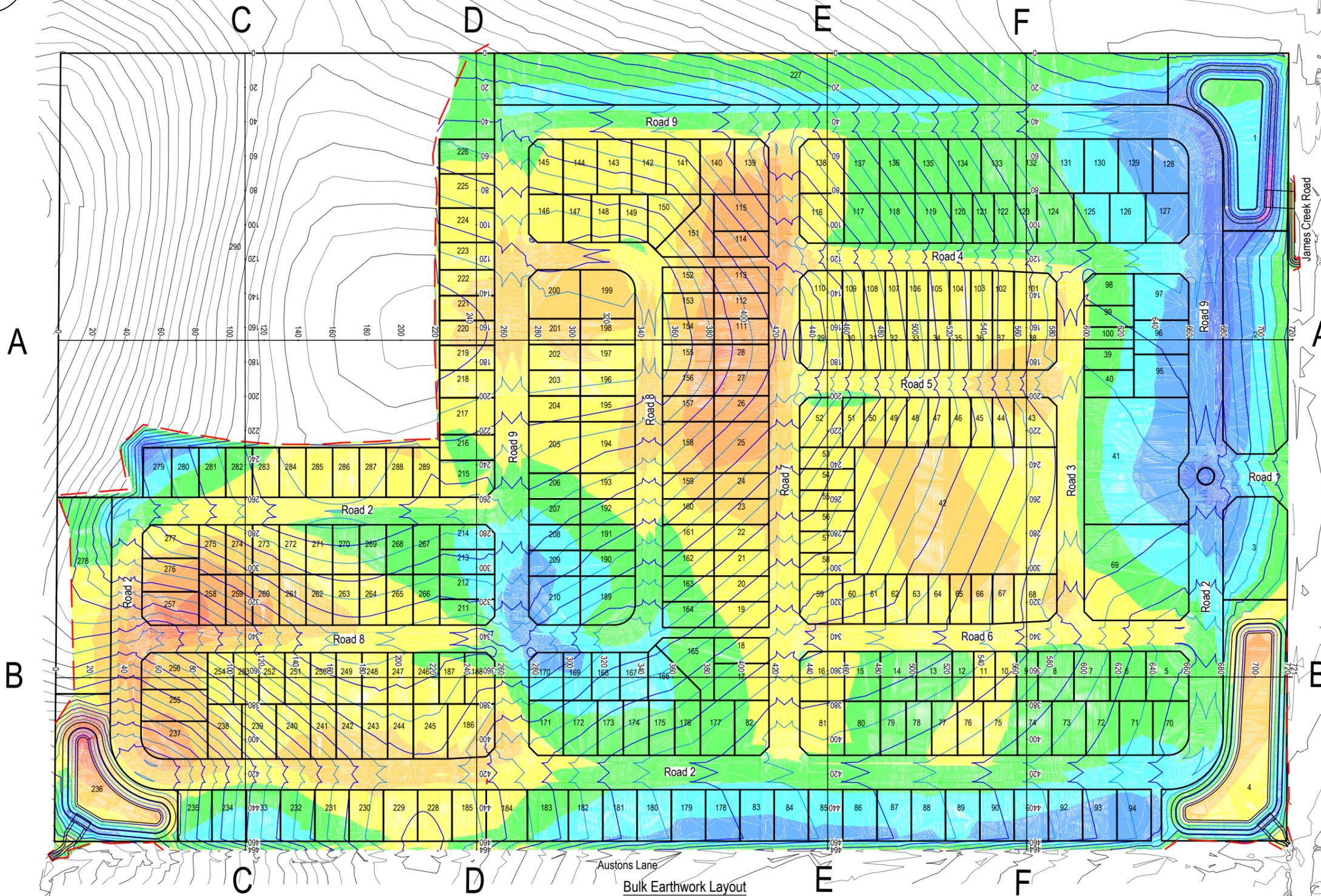
Designed	JLC	Drawn	JLC	Checked			
Approved	MVE	Date	8/10/2021	MVE			
XREFs							
Scale							
A	metres	0	12.5	25	37.5	50	62.5

Drawing Title
Site Cross Sections
Sheet 1 of 2

Drawing Number
3204/C135

Bulk Earthworks Parameters						
Parameter	Base Surface	Comparison Surface	Total Area (m ²)	Total Cut Volume (m ³)	Total Fill Volume (m ³)	Balance (m ³)
Cut - Fill	Existing surface	Design surface	280,915	78,065	88,345	10,280 (fill)

- Notes:
- Figures are approximate, design will be refined at detailed design stage to include more of a balanced earthworks.



Retaining structure to be constructed in lieu of batter along dripline as required to avoid impacting existing trees within proposed Austons Lane road reserve

Appendix B Response to SES Advice

The NSW SES reviewed the flood emergency plan previously prepared by Water Engineering Plus ("WEP") and the flood risk information (e.g. Clarence Valley Local Flood Plan, Lower Clarence Flood Model Update 2022 etc.) available to the NSW SES and issued an advice letter (Ref: ID2296) dated 8 March 2024. A summary of SES's advice pertinent to flooding and flood risk management plan are outlined below, followed by WEP's response:

- *"Note the proposed development becomes a high flood island in a 5% flood extent due to James Creek Road becoming inundated to the north and Gardners Road to the south¹ with a flood hazard level defined as H5 which is unsafe for vehicles and people². We note the proposed consideration to improve Gardners Road which may be raised to above the 1% AEP level and may provide access to additional services and/or facilities, but the current advice has assessed existing conditions".*

This updated FEP includes consideration of the potential timing of flooding and isolation period of Gardiners Road assumed to be upgraded (Refer to Section 3 of this FEP).

- *"Do not support the plan to shelter in place during a PMF given the difficulty accessing the flood-free location, anticipated duration of isolation, likely lack of power, water and hygiene facilities".*

This updated Flood Emergency Plan proposes off-site evacuation as the primary strategy for emergency management in flood events. Further details of the FEP are provided in Section 3 of this report. Whilst the SES does not support a plan to shelter-in-place (SIP), the proposed development is such that all residential floors, the childcare and commercial centres will be above the level of the PMF event, and this will provide a safe onsite SIP if residents do not evacuate prior to losing access routes due to unforeseen circumstances.

- *"Recommend that clarification is required on the flood modelling. Modelling between the 1%AEP and PMF would be useful to understand at which level the site becomes impacted. The PMF modelling should also include climate change. This data is not clear from the extent of inundation of the developed site in the FEP".*

This updated FEP contains clarification on the flood modelling (refer to Section 2.1 of this FEP). It is noted that PMF modelling is not required to include climate change in accordance with international as well as national rainfall and runoff guidelines.

- *"Recommend further work is undertaken to understand the evacuation capacity constraints and time required for evacuation and proposed location and facilities. If residents do not evacuate prior to losing all access and egress routes, they are likely to require resupply and potentially require rescue increasing risk to life and adding strain to limited NSW SES resources."*

This updated FEP contains information on the time required for evacuation and proposed evacuation centre and nominated evacuation route (Section 3 of this FEP).

- *"Recommend ensuring that the development complies with Ministerial Directions relating to evacuation ability of sensitive development in a PMF flood."*

The development includes a childcare centre above the PMF. It is intended that the centre would be closed in advance of a flood and parents would evacuate with children once they have collected them.

- *"Recommend the development of robust, thorough, and detailed flood emergency management plans to satisfy the need for ongoing community awareness and the importance of early evacuation when the development is completed."*

This updated FEP includes a recommendation to develop ongoing community education and awareness.

Our Ref: ID2296
Your Ref:

8 March 2024

Martin Giles
Water Engineering Plus
6 Mayneview Street
Milton QLD 4064

email: mgiles@wep.com.au
CC: michael.stubbs@one.ses.nsw.gov.au

Dear Martin,

Flood Emergency Plan for The Village at James Creek

Thank you for the opportunity to provide comment on the Flood Emergency Plan (FEP) for the proposed development at Lot 104 of DP751388 on James Creek Road known as The Village at James Creek. We understand that the proposed development consists of a total of 280 residential lots and commercial areas comprising:

- 206 Residential R1 Zone lots;
- 74 Residential R3 Zone lots;
- 1 Childcare Centre; and
- 1 Commercial Centre.

The NSW State Emergency Service (NSW SES) is the agency responsible for dealing with floods, storms and tsunamis in NSW. This role includes, planning for, responding to and coordinating the initial recovery from floods. As such, the NSW SES has an interest in the public safety aspects of the development of flood prone land, particularly the potential for changes to land use to either exacerbate existing flood risk or create new flood risk for communities in NSW.

It is the preference of NSW SES that all development follows the application of sound land use planning and flood risk management in accordance with the Flood Prone Land Policy, the [Flood Risk Management Manual](#) 2023 (the Manual) and supporting guidelines. This includes site design and stormwater management measures that minimise any risk to the community.

The NSW SES has reviewed the proposed FEP and the flood risk information (e.g. Clarence Valley Local Flood Plan, Lower Clarence Flood Model Update 2022 etc.) available to the NSW SES and provide advice in Attachment A. In summary, we:

- **Emphasise** that the NSW SES does not have statutory authority to endorse or approve flood emergency response plans. In addition, the NSW SES is opposed to the imposition of development consent conditions requiring private flood evacuation plans rather than the application of sound land use planning and flood risk management as outlined in the Support for Emergency Management Planning.
- **Note** the proposed development becomes a high flood island in a 5% flood extent due to James Creek Road becoming inundated to the north and Gardners Road to the south¹ with a flood hazard level defined as H5 which is unsafe for vehicles and people². We note the proposed consideration to improve Gardners Road which may be raised to above the 1% AEP level and may provide access to additional services and/or facilities, but the current advice has assessed existing conditions.
- **Do not support** the plan to shelter in place during a PMF given the difficulty accessing the flood-free location, anticipated duration of isolation, likely lack of power, water and hygiene facilities.
- **Recommend** that clarification is required on the flood modelling. Modelling between the 1%AEP and PMF would be useful to understand at which level the site becomes impacted. The PMF modelling should also include climate change. This data is not clear from the extent of inundation of the developed site in the FEP.
- **Recommend** further work is undertaken to understand the evacuation capacity constraints and time required for evacuation and proposed location and facilities. If residents do not evacuate prior to losing all access and egress routes, they are likely to require resupply and potentially require rescue increasing risk to life and adding strain to limited NSW SES resources.
- **Recommend** ensuring that the development complies with Ministerial Directions relating to evacuation ability of sensitive development in a PMF flood.
- **Recommend** referring this proposal to the Biodiversity and Conservation Division of the Department of Climate Change, Energy, Environment and Water (DCCEEW), particularly regarding the lots that are impacted in the PMF, given the extent of planned infill.
- **Recommend** the development of robust, thorough, and detailed flood emergency management plans to satisfy the need for ongoing community awareness and the importance of early evacuation when the development is completed.

Further useful information can be found:

- NSW SES website <https://www.ses.nsw.gov.au/disaster-tabs-header/flood/>
- Emergency Business Continuity Plan (<http://www.sesemergencyplan.com.au/business/>)
- The Department of Climate Change, Energy, the Environment and Water website

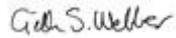
¹ Clarence Valley Council, *Intramaps – FloodStudy2022 1 in 20yr* accessed on 29.02.23

² Ibid Flood hazard map accessed on 29.02.23

<https://www.environment.nsw.gov.au/research-and-publications/publications-search/floodplain-development-manual>

Please feel free to contact Suede Stanton-Drudy via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely

A handwritten signature in black ink that reads 'Gillian Webber'.

Gillian Webber

Coordinator Emergency Risk Management - Regional

NSW State Emergency Service

ATTACHMENT A: Principles Outlined in the Support for Emergency Management Planning Guideline³

Principle 1 Any proposed Emergency Management strategy should be compatible with any existing community Emergency Management strategy.

Any proposed Emergency Management strategy for an area should be compatible with the evacuation strategies identified in the relevant local or state flood plan or by the NSW SES. Direction 4.1 issued by the Minister for Planning under section 9.1(2) of the *Environmental Planning and Assessment Act 1979* states a planning proposal must not permit development for childcare facilities where occupants cannot effectively evacuate. It is noted that during a PMF flood event the road and carpark to the childcare centre becomes inundated, preventing evacuation.

Development strategies relying on an assumption that mass rescue may be possible where evacuation either fails or is not implemented are not acceptable to the NSW SES. Therefore, the NSW SES recommends an evacuation assessment is undertaken to understand evacuation capacity constraints, where the residents are to be relocated, and time required for evacuation. Risk assessment should have regard to flood warning and evacuation demand on existing and future access/egress routes.

Principle 2 Decisions should be informed by understanding the full range of risks to the community.

Decisions relating to future development should be risk-based and ensure Emergency Management risks to the community of the full range of floods are effectively understood and managed. The site is flood free up to the 1%AEP including climate change⁴. Before the PMF parts of the east edge and the south-west corner of the site become inundated, including the only road out of the development, up to hazard level H5⁵. We note the intention for residents to evacuate during flooding up to and including 1% AEP, based on the assumption that Gardners Road will be raised to allow such evacuation. In the absence of this, and during a flood greater than 1% AEP residents are expected to shelter in place.

Development strategies relying on deliberate isolation or sheltering in buildings surrounded by flood water are not equivalent, in risk management terms, to evacuation. Sheltering in a building within the flood extent is not safe, as proposed in the plan, and may result in isolating people including children for days potentially without power, food or water. Isolation also increases the risk of fire or medical emergencies. Evacuation must not require people to drive or walk through flood water. Ideally the access/egress routes should provide rising road access and/or be passable up to at least a 0.2% AEP local flooding.

³ NSW Government. 2023. Principles Outlined in the Support for Emergency Management Planning Guideline

⁴ Water Engineering Plus (2023) - The Village at James Creek Flood Emergency Plan page 4

⁵ Ibid

It is noted that the development has the potential to become isolated for a duration of up to five days and more than this in extreme flooding⁶. Occasionally there may be two or more separate rain events a few days apart, causing floods with multiple peaks on the Clarence River⁷. Early evacuation is the flood emergency management option recommended by the NSW SES.

The FEP must consider the impacts of localised flooding on evacuation routes and the likely demands that other sections in the community may be placing on public and private transport resources. The NSW SES is aware of a number of significant development proposals for the Yamba area which would add additional stress to both the road network and the SES response capability in the event of significant flooding in the area.

While the development is largely above the PMF, it may be useful to refer to the Biodiversity and Conservation Division of the Department of Climate Change, Energy, Environment and Water (DCCEEW), particularly regarding the lots that are impacted in the PMF, given the extent of planned infill.

Principle 3 Development of the floodplain does not impact on the ability of the existing community to safely and effectively respond to a flood.

The ability of the existing community to effectively respond (including self-evacuating) within the available timeframe on available infrastructure is to be maintained. It is not to be impacted on by the cumulative impact of new development. The proposal is situated on a high-risk floodplain as identified in the NSW 2022 Independent Flood Inquiry. Recommendation 22 and 15 of the NSW 2022 Flood Inquiry advocates for a planned retreat from areas at most risk on the floodplain. The proposed development is essentially an advance into the floodplain. The flood risks of the Northern Rivers region are so significant that any further development increases the burden on current and future communities and emergency services.

Principle 4 Decisions on redevelopment within the floodplain does not increase risk to life from flooding.

The preferred Emergency Management approach is evacuation, where evacuation capacity and capability has been demonstrated as the most effective strategy to manage Emergency Management risks (i.e. a strategy that enables the users of development to self-evacuate to an area outside the floodplain that has adequate services to sustain the community in an orderly planned outcome). This includes consideration of flood warning and evacuation demand on existing and future access/egress routes considering potential impacts of localised flooding. Where this is not possible any decision involving redevelopment, and in particular increasing population at risk, needs to consider the safety of the community. This may include provisions such as effective flood warning, a practical safe refuge for the full range and behaviour of flooding (i.e. above the PMF and designed to withstand the associated forces of flooding), and provisions to be able to safely self-sustain for short duration flooding. Managing

⁶ NSW SES, *Clarence Valley Local Flood Plan 2017* Volume 2 section 2.9.6c.

⁷ NSW SES, *Clarence Valley Local Flood Plan 2017* Volume 2 p.13

these risks requires careful consideration of development type, likely users, and their ability respond to minimise their risks. This includes consideration of:

- **Isolation** – There is no known safe period of isolation in a flood, the longer the period of isolation the greater the risk to occupants who are isolated. The suggestion that the proposed commercial unit will have the resources to supply up to 500 people with food and water for up to 5 days, particularly given the likelihood of power disruption, should be reviewed.
- **Secondary risks** – This includes fire and medical emergencies that can impact on the safety of people isolated by floodwater. The potential risk to occupants needs to be considered and managed in decision-making. It is our understanding that during times of flood, the council drinking water supply can become contaminated. It is recommended that residents listen to local radio and SES/rescue personnel for update on the drinking water status to prevent any outbreak of sickness or disease while sheltering in place.
- **Consideration of human behaviour** – The behaviour of individuals such as choosing not to remain isolated from their family or social network for an extended flood duration or attempting to return to a building during a flood, needs to be considered when adopting any Emergency Management strategy. The FEP should address this, including for example the high likelihood that parents and carers will consider driving through flood waters to reach the children at the childcare centre. A private evacuation plan is not a fail-safe measure to manage risk to life, and therefore we encourage consideration of additional flood risk management measures to ensure that there is not considerable risk to life if the FEP is ignored.

Principle 5 Risks faced by the itinerant population need to be managed.

Any Emergency Management strategy needs to consider people visiting the area or using a development. Yamba has four peak seasons with a potential population increase of more than 100%⁸. This needs to be considered in evacuation planning as timing of traffic movement will be affected.

Principle 6 Recognise the need for effective flood warning and associated limitations.

An effective flood warning strategy with clear and concise messaging understood by residents and visitors is key to providing the community an opportunity to respond to a flood threat in an appropriate and timely manner. All residents and users of the proposed development should be made aware of their flood risk. The Hazards Near Me app (a tool to receive flood warnings as part of the Australian Warning System) and the NSW SES website contain comprehensive information for the general community about what to do before, during and after floods as well as in-language resources and HazardWatch (NSW SES interactive information and warnings site).

The NSW SES recommends the creation of a flood emergency management plan which is robust, thorough and detailed enough to address all aspects of a flood emergency including

⁸ NSW SES, *Clarence Valley Local Flood Plan 2017* Volume 2 p.74

responsibilities, transportation, medical emergency, vulnerabilities, flood forecasting and warning, flood emergency response triggers, evacuation and shelter in place procedures and capability assessments, and plan dissemination and review. This list is not exhaustive. The FEP should advise the ill or vulnerable who have specific support requirements with respect to mobility, special needs, medications and management to ensure they continue to receive appropriate care and information. Any plan should include a review mechanism for updating the plan at regular intervals and whenever additional flood information is available or highlighted during a flood events, as well as a mechanism for alerting future residents of the risk and the need to evacuate and when, and for vulnerable people (including children) to evacuate early.

Principle 7 Ongoing community awareness of flooding is critical to assist effective emergency response.

In terms of the current proposal, the flood risk at the site and actions that should be undertaken to reduce the potential risk to life should be clearly communicated to all site users, for example through signage and emergency drills, during and after the construction phase. Development in a floodplain will increase the need for NSW SES to undertake continuous community awareness, preparedness, and response requirements. At first glance it may seem that if people live in an area where frequent low-level floods occur, they would be more flood aware. Unfortunately, although they may be aware of flooding, they generally come to the view that they are not at risk because they think all floods are like the small ones they often see. This is not true and big floods will almost always catch people by surprise and exceed their capacity to deal with the situation unless they have considered this scenario in their planning and preparedness. In addition, residents will have lived in this community for a short period and may be unlikely to appreciate the local flood threat, may have difficulty understanding advice about flooding, and may need special attention in terms of education and communication of warnings and other information.

Our Ref: ID2296-1

Your Ref:

14 May 2024

Martin Giles
Water Engineering Plus
6 Mayneview Street
Milton QLD 4064

email: mgiles@wep.com.au

CC: elena.palamara1@ses.nsw.gov.au

Dear Martin,

Flood Emergency Plan for The Village at James Creek

Thank you for forwarding the updated Flood Emergency Plan (FEP) for the proposed development at Lot 104 of DP751388 on James Creek Road known as The Village at James Creek on James Creek Road. We understand that the proposed development consists of a total of 280 residential lots and commercial areas comprising:

- 206 Residential R1 Zone lots;
- 74 Residential R3 Zone lots;
- 1 Childcare Centre; and
- 1 Commercial Centre.

The NSW SES has reviewed the proposed FEP and the flood risk information (e.g. Clarence Valley Local Flood Plan, Lower Clarence Flood Model Update 2022 etc.) available to the NSW SES. In summary we:

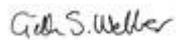
- **Recommend** amending 3.1.1 Regional Evacuation Centre page 11 – While the NSW SES warns for evacuation, **NSW Welfare Services** is the authority responsible for establishment of an Evacuation Centre.
- **Request** that references to ‘Evacuation Warning’, ‘Evacuation Order’ and ‘All Clear’ are removed. The Australian Warning System uses three categories of hazard warnings: Advice, Watch and Act, and Emergency Warning. These categories replace the previous terminology. Please note:
 - All warnings issued by the NSW SES are considered official warnings and will be viewed on the SES website and the HazardWatch website and app which was launched by the NSW SES on 30 September 2022 as part of the launch of the Australian Warning System. This new site is geared to displaying official NSW SES warnings and in time flash flood warnings and warnings from other emergency services.
 - Further information about the warning levels and actions can be found on the NSW SES website at <https://www.ses.nsw.gov.au/about-us/our-warnings/>

Further useful information can be found:

- NSW SES website <https://www.ses.nsw.gov.au/disaster-tabs-header/flood/>
- Emergency Business Continuity Plan (<http://www.sesemergencyplan.com.au/business/>)
- The Department of Climate Change, Energy, the Environment and Water website <https://www.environment.nsw.gov.au/research-and-publications/publications-search/floodplain-development-manual>

Please feel free to contact Suede Stanton-Drudy via email at rra@ses.nsw.gov.au should you wish to discuss any of the matters raised in this correspondence. The NSW SES would also be interested in receiving future correspondence regarding the outcome of this referral via this email address.

Yours sincerely

A handwritten signature in black ink that reads 'Gillian S. Webber'.

Gillian Webber

Coordinator Emergency Risk Management - Regional

NSW State Emergency Service

Appendix C Sample Home Emergency Plan

Home Emergency Plan

2024

To help your household
prepare for floods, storms
and tsunami



FOR EMERGENCY HELP IN FLOOD,
STORM AND TSUNAMI CALL

132 500

In life-threatening emergencies call 000 (triple zero)



FloodSafe

StormSafe



TsunamiSafe



Welcome to your Home Emergency Plan

The NSW SES is responsible for the emergency management of floods, storms and tsunami in NSW.

This Home Emergency Plan is specifically targeted to these events but the advice can be useful for other hazards.

Being prepared now can significantly reduce:

- > Loss of life
- > Loss of property
- > Loss of possessions

Being prepared now can also help you respond better and recover faster when these events happen.



**Possible hazards where I live:**

- > Storms
- > Flash Floods
- > Floods

These hazards can have devastating impacts on people, property and possessions. Even if you are not directly impacted by floods, storms or tsunami, you may still be affected by these events as roads may be damaged or flooded, access to areas may be restricted, amenities may be lost, you may become isolated, areas you are planning to travel to may be impacted and family or friends may be affected.



I am responsible (outside of your household) for (e.g., friends):

- >
- >
- >
- >
- >
- >



#NSWSES



/NSWSES



/NSWSES

FOR EMERGENCY HELP IN FLOOD,
STORM AND TSUNAMI CALL
132 500
In life-threatening emergencies call 000 (triple zero)



Prepare NOW

8 tips you can do now to prepare for floods, storms and tsunamis, as well as for other disasters:

1. Know your risk

> Know if where you live could be at risk from floods, storms or tsunamis, as well as other disasters

Know your storm risk

> Visit the NSW SES StormSafe website www.stormsafe.com.au for StormSafe information and read the StormSafe Guide

> Talk with neighbours and people who have lived in the area for a while about the local storm history

Know your flood risk

> Find out about your local flood history and visit the NSW SES FloodSafe website www.floodsafe.com.au and read the FloodSafe Guides relevant to your area

> Talk with neighbours and people who have lived in the area for a while about the local flood history

> Know the heights your area is affected by floods. CLARENCE VALLEY COUNCIL may be able to provide you with specific information on how floods affect your property

> Be aware of the natural signs of flooding such as heavy rainfall and rushing or pooling water

Know your tsunami risk

> Visit the Bureau of Meteorology website www.bom.gov.au to find out what a tsunami is, how they are generated, what warning systems are in place and what warning products exist

> Know what to do when these warnings are issued

To find out your bushfire risk, visit the NSW Rural Bushfire Service www.rfs.nsw.gov.au

To find out your urban fire risk, visit Fire and Rescue NSW www.nswfb.nsw.gov.au

For information on earthquakes, heat waves and other disasters, visit the Australian Emergency Management Institute www.em.gov.au



2. Know where to go

- > Have a plan of where you will go if you need to evacuate

3. Know your plan

- > Use this Home Emergency Plan to document what you will do before, during and after flood, storm and tsunami

- > Practice and update your plan regularly

4. Get your kit together

- > Put together an emergency kit which is suitable for your household needs

5. Check your insurance

- > If insurance is available, check the cover is adequate for where you live and make sure it is current

6. Prepare now to act early

- > Know the triggers for what you need to do and when you need to do it
- > Practice your Home Emergency Plan regularly and keep it up-to-date
- > Maintain a sufficient level of supplies in case you become isolated
- > Know what to do if you have no amenities

7. Listen to local radio

- > Know the local radio station you need to listen to for information, updates and advice
- > Know the ABC radio frequency in your area

Your local radio stations

2CS & STAR FM 106.3 FM, 105.5 FM
2GF 103.9 FM
2HC 100.5 FM
ABC Coffs Coast 92.3 FM, 94.5 FM
ABC Lismore 94.5 FM
CHY FM 104.1 FM
CLARENCE COAST'S FM 104.7 FM



8. Know who to call

> Keep a list of emergency numbers near your phone, on your mobile or on your fridge

NSW SES	132 500
Life-threatening emergencies	000 (triple zero)
NSW SES Facebook	www.facebook.com/nswses
NSW SES twitter	https://www.twitter.com/nswses

Name: CLARENCE VALLEY COUNCIL
Phone: 02 6643 0200
Website: <http://www.clarence.nsw.gov.au>

Name:
Phone:
Mobile:





Get your kit together. Put together an emergency kit today!

An emergency kit can help save precious time in an emergency situation. It provides items you might need if you lose power or need to leave your home in a hurry.

Your emergency kit contents:

- > Portable radio with spare batteries
- > Torch with spare batteries
- > First aid kit (with supplies necessary for your household)
- > Candles and waterproof matches
- > Important papers including emergency contact numbers
- > Copy of any Home Emergency Plans
- > Waterproof bag for valuables

When leaving or evacuating your property, place in your emergency kit:

- > A good supply of required medications
- > Any special requirements and supplies for babies, the disabled, infirm and/or elderly
- > Appropriate clothing and footwear
- > Fresh food and drinking water

Keep your emergency kit in a waterproof storage container.

There may be other items you need to place into your emergency kit depending on what risks there are in your area. Check with the NSW Rural Fire Service and Fire & Rescue NSW for specific items you may need to place in your emergency kit if you are at risk of bushfire or urban fire.

Check your emergency kit on a regular basis and remember to check use-by dates on batteries and gloves. Re-stock any items if you need to.



What can be done NOW:

Storms:

- > Maintain your property, yard and balcony
- > Trim overhanging trees and branches around your property
- > Clear leaves and other debris from gutters and downpipes
- > Check that walls, eaves and roofs are secure and in good repair

Storms can also cause flash flooding, which can be very dangerous.

It is safer not to be in an area if flash flooding is a possibility.

Be aware of natural indicators of flash flooding:

- > Very heavy rainfall
- > Rushing or quickly pooling water

Floods:

- > Know the triggers for what you need to do and where you need to go when it floods
- > Talk with your local NSW SES members about being FloodSafe
- > Be aware of the natural signs of flooding such as heavy rainfall and rushing and pooling water
- > Talk with friends and relatives about organising a safe place to stay outside flood affected areas
- > Know the safest route to travel if you need to evacuate

When preparing your home:

- > What objects need securing (including fridges, freezers and outdoor furniture - those that are likely to float and cause damage)
- > What furniture and possessions need to be stacked and where is the best place to stack them (electrical items on top)
- > Where waste containers, chemicals and poisons can be relocated to or stacked



- > How to block toilets and floor drains (sand bags, etc) to prevent sewage backing up
- > Identify a care support person (family member, friend, service worker, neighbour), who can help plan and prepare
- > This care support person may also be available to assist in putting this plan into action

People with restricted or no mobility:

- > Consider placing mobility devices in an handy location so that access to them is easier in an emergency
- > Plot an accessible evacuation route
- > Think in advance about what might need to be done if the access ramp was unusable or lifts in the building were not operating

Elderly:

- > Identify a care support person who can help prepare an emergency plan or pass on any information via a preferred means of communication
- > This care support person may also be available to assist when needed to put into action this emergency plan
- > Family may also be able to assist in preparing an emergency plan

Children under 5:

- > Have a supply of required items for babies and toddlers for at least a week. Items may include nappies, baby food, formula and medications

Agisted animals:

- > Talk to the property owner about the local risks and about their emergency plans
- > Add these plans to your Home Emergency Plan
- > Monitor the weather conditions near where your animals are agisted

For Livestock:



- > Fit gates on internal fences to avoid moving stock along public roads
- > Mark gates and water locations on a map of your property. Have this map available in case someone has to move stock for you

More information is available from the Department of Primary Industries www.dpi.nsw.gov.au

For wildlife:
RSPCA www.rspcansw.org.au



Notes

Use this page to detail any preparation notes you need to make.

These notes can include triggers for action, other actions specific to your situation, flood heights you need to be aware of or safe evacuation routes in your area.

**BEFORE all emergencies:**

Warnings are issued by the Bureau of Meteorology for floods, severe weather, thunderstorms, tropical cyclones and tsunamis through their website www.bom.gov.au

- > Activate this emergency plan
- > Listen to your local radio station for information, updates and advice
- > Check to see if neighbours are aware of the warning and need assistance
- > Locate and check your emergency kit
- > Follow all advice and instructions given to you by emergency services

It is safer to be away from areas which are going to be impacted by these events.

When flash flooding is likely the best action to take is to leave low-lying areas (evacuation) well before it may happen, but only if it is safe to do so. If you are trapped by rising floodwater, seek refuge in the highest part of a sturdy building. Stay there and call 000 (triple zero).

- > Contact care support persons if you have previously organised to do this and prepare to respond as you have planned

BEFORE Storms:

When a Severe Weather Warning or a Severe Thunderstorm Warning is issued by the Bureau of Meteorology :

- > Secure or put away any loose items from around your home, property or balcony that could become dangerous in storms
- > Stay indoors away from windows
- > Park vehicles under solid shelter away from trees and power lines
- > If driving, pull over to the side of the road away from gutters, drains, trees and power lines
- > Reconsider non-essential travel

BEFORE Floods:

A Flood Watch may be issued by the Bureau of Meteorology when floods have the possibility of happening. A Flood Warning is issued by the Bureau when flooding is likely. Flood Warnings are issued on rivers that have flood gauges.

- > Secure any items that are likely to float and cause damage



- > Prepare furniture and other items to be stacked if required
- > Relocate waste containers and poisons well above predicted flood heights
- > Prepare sandbags to block toilets and drains
- > Coordinate relocation of agisted animals
- > Move animals to high ground with adequate natural feed. Additional feed may be required for animals stranded for extended periods
- > In extreme circumstances, the best option may be to cut fences so that animals can escape danger (and be collected later)

Sometimes there can be little or no warning of storm activity.

**EVACUATING:**

Evacuation Warnings and Evacuation Orders are issued by the NSW SES for floods, storms and tsunami through the NSW SES website www.ses.nsw.gov.au and local media.

When an Evacuation Warning is issued:

- > Locate important papers, valuables and mementos. Put them in your Emergency Kit
- > Keep listening to your local radio station for information, updates and advice
- > Follow instructions given to you by emergency services

When an Evacuation Order is issued, staying inside a property, even one which you think is safe, may be very dangerous. If you are warned to evacuate it is always safest to move to a location away from the affected area early:

- > Turn off the electricity and gas at the mains before you leave and turn off and secure any gas bottles
- > Take your emergency kit
- > Take your pets with you
- > Never enter or travel through floodwater
- > Keep listening to your local radio station for information, updates and advice
- > Follow your Home Emergency Plan or Business FloodSafe Plan
- > Follow all instructions given to you by emergency services
- > Wear appropriate clothing

You should leave well before roads and evacuation routes are cut off or closed.

Stay with family or friends away from the affected area. Evacuation centres may also be established by welfare services in your area. Help may include:

- > Temporary accommodation
- > Financial help
- > Personal support
- > Refreshments and meals
- > Clothing and personal needs



- > Help in contacting family and friends
- > Take relevant and adequate toddler and baby items with you to last at least a week



DURING all emergencies

- > For emergency help in floods, storms and tsunami, call the NSW SES on 132 500
- > In life-threatening emergencies, call 000 (triple zero)
- > Check that your neighbours have received all warnings and advice
- > Keep listening to your local radio station for information, updates and advice
- > Follow all advice and instructions given to you by emergency services

DURING storms:

- > Stay clear of creeks, drains, causeways, gutters, streams, fallen trees, power lines and damaged buildings
- > If driving, put on your hazard lights and pull over to the side of the road, keeping clear of drains, causeways, streams, creeks, trees and power lines
- > If outdoors, seek secure shelter away from drains, causeways, streams, creeks, trees and power lines

DURING floods:

A Flood Warning is issued by the Bureau of Meteorology when flooding is about to happen and may be updated during floods.

A Flood Warning provides a predicted flood level on a river gauge and a time at which the river will reach that level.

- > Never drive, ride or walk through floodwater
- > Never play in floodwater
- > Keep in contact with your neighbours
- > Be prepared to evacuate if advised

Floodwater can be deeper and faster flowing than it appears. It can erode roadways and create deep pot holes.

Floodwater can also contain sewerage, debris, dead animals and contaminants such as oil and petrol.



FOR EMERGENCY HELP IN FLOOD,
STORM AND TSUNAMI CALL

132 500

In life-threatening emergencies call 000 (triple zero)

**AFTER all emergencies:**

If outside the impacted areas:

- > Do not enter these areas until an official 'All Clear' has been issued

If inside impacted areas:

- > Be aware of health and safety issues
- > Keep listening to your local radio station for information, updates and advice
- > Check to see if your neighbours need help
- > Do not go sightseeing as this may hinder recovery efforts or put yourself and others at risk

AFTER storms:

- > Check your house or property for damage
- > Stay clear of creeks, drains, causeways, gutters, streams, fallen trees, power lines and any damaged buildings

The NSW SES can assist with temporary measures to make your property safer. Any damage needs to be assessed and repaired by qualified tradespeople.

AFTER Floods:

- > Ensure the structural stability of your property before entering. Check for damage to windows, walls and the roof and be especially cautious of potential contaminants including asbestos
- > Make sure the electricity and gas is turned off before going inside. Use a torch to carry out inspections inside buildings
- > If power points, electrical equipment, appliances or electrical hot water systems have been exposed to floodwater or are water damaged in any way, they must be inspected by a qualified electrician before use
- > Gas appliances and gas bottles that have been exposed to floodwater should be inspected for safety before use
- > Wear suitable protective clothing, including boots and gloves, when cleaning up
- > Be aware of any slip, trip or fall hazards



- > Never eat food which has been in contact with floodwater
- > Only use clean utensils and personal items
- > Have a supply of fresh drinking water

The NSW SES will issue an 'All Clear' when it is safe to return to an area that has been evacuated.



RECOVERY

The aftermath of a natural hazard can affect people in different ways. Sometimes we may be exposed to things that are distressing.

The NSW SES has developed a Recovery Guide to assist people recover from floods, storms and tsunamis.

The guide is available from both the FloodSafe and StormSafe websites - www.floodsafe.com.au and www.stormsafe.com.au

Here are a few tips from the guide:

- > If you can, contact family or friends to let them know that you are OK or if you need help
- > Follow all instructions given to you by emergency services
- > Update your plan with what you have learned from this disaster

NSW Rural Fire Service and NSW Fire and Rescue can also provide information on recovering from bushfire and urban fire - www.rfs.nsw.gov.au and www.fire.nsw.gov.au

Natural disasters can damage property and people, but they can also often help build a sense of community.

Talk to people in your community and help each other where possible. Seek out information and share it with those around you.

As part of the recovery from natural disasters, communities and Government are also supported by the non-Government sector. Community partners such as the Salvation Army, ADRA, Anglicare, St Vincent De Paul and the Red Cross provide a range of assistance to support people and communities in time of need.

Disaster Recovery Centres may be established following some disasters. Recovery centres may provide a range of welfare services including financial assistance, personal support, organising temporary accommodation and providing information and referrals. If you have been affected by floods and require assistance, contact Disaster Welfare Services on 1800 018 444

Attachment 3 – Updated Statement of Landscape Intent



The Village at James Creek

Statement of Landscape Intent

Prepared For:
MPD Investments Pty Ltd



Australia
China
South East Asia

Follow us on



placedesigngroup.com

Project	The Village at James Creek
Report title	Statement of Landscape Intent
Document number	230219
Prepared for	MPD Investments Pty Ltd
Authors	Naomi Cole
Revision number	1
Revision issue date	17 May 2024
Approved	Peter Bell, Clint Wood
Reason for revision	Development Application

Disclaimer: This report has been prepared in accordance with the scope of services described in the contract or agreement between Place Design Group Pty Ltd ACN 082 370063 and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Any findings, conclusions or recommendations only apply to the aforementioned circumstances and no greater reliance should be assumed or drawn by the Client. Furthermore, the report has been prepared solely for use by the Client and Place Design Group accepts no responsibility for its use by other parties.

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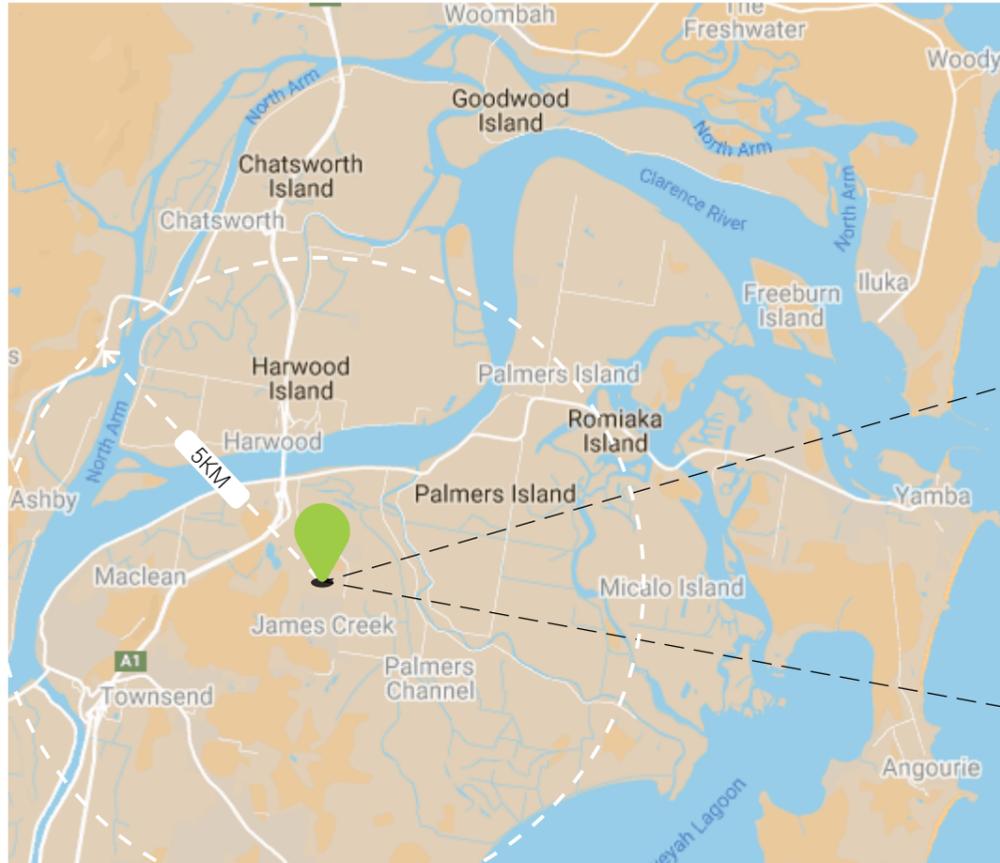
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01

SITE CONTEXT

1.1 Location



James Creek

1.2 Site Photos



01 View from James Creek Road



02 View from James Creek Road



03 View from James Creek Road



04 View from Austons Lane



Key Plan



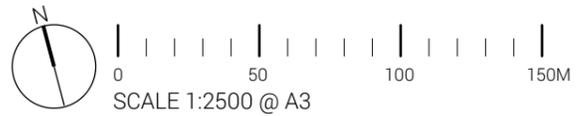
02

OVERALL LANDSCAPE DESIGN

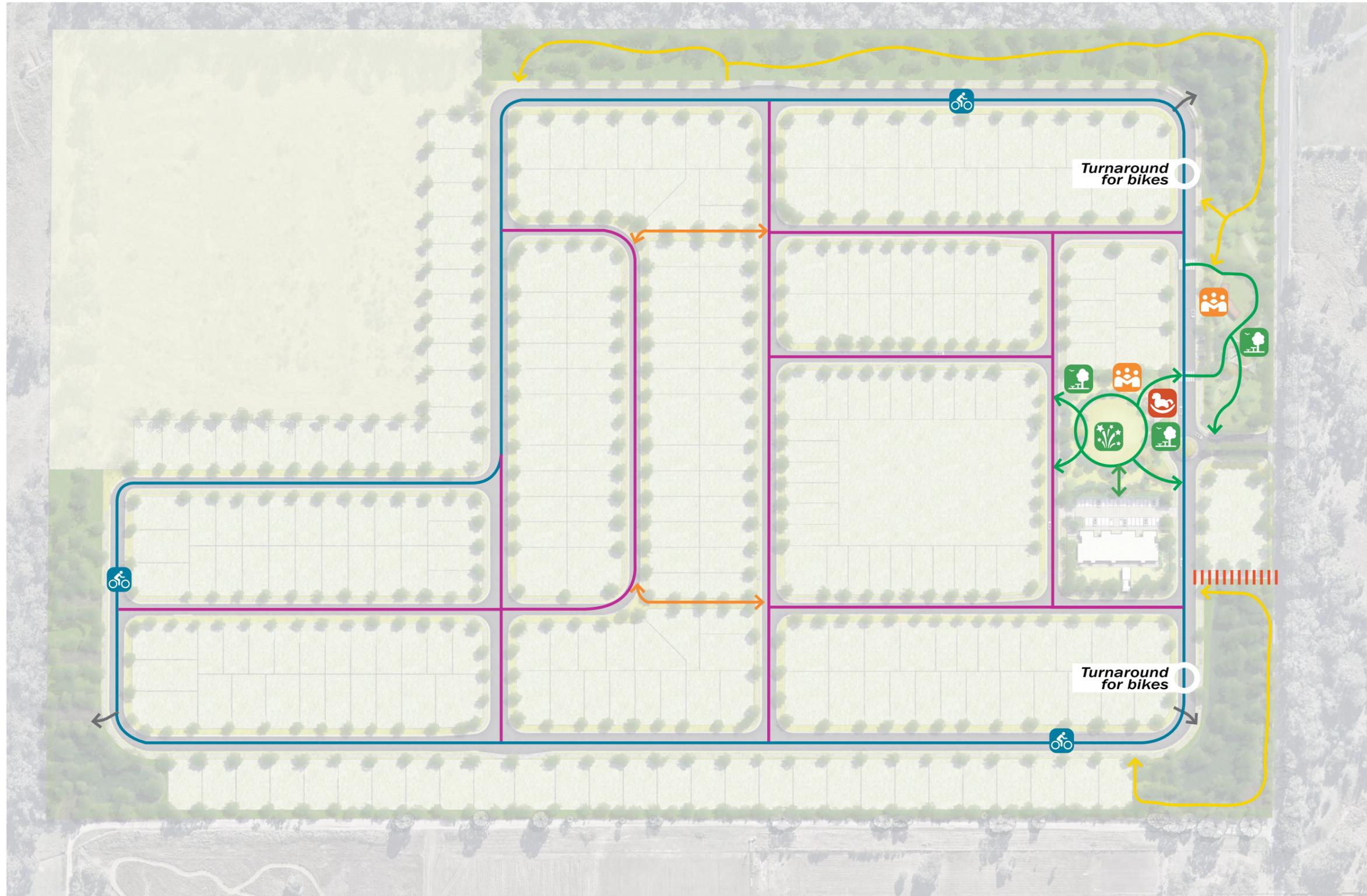
2.1 Landscape Masterplan



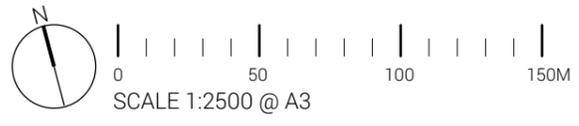
- LEGEND**
- 1. Entry boulevard
 - 2. Village Green and Playground
 - 3. Northeast park & basin
 - 4. Southeast park & basin
 - 5. Southwest park & basin
 - 6. Perimeter community loop for bike & pedestrian recreation
 - 7. Pedestrian linkage between lots. 1500mm high pool fence to adjacent lots
 - 8. Entry Park with Community Facilities
 - 9. Planting batter to Austons Lane
 - 10. Existing trees to be retained
 - 11. Fencing on boundary
 - 12. Feature fencing on road frontage
 - 13. Informal path around basins
 - 14. Landscape planning in this area should be to the requirements in accordance with the Planning for Bushfire Protection (2019 Appendix A section 4.1.1)
 - 15. Emergency linkage from development through to James Creek Road



2.2 Circulation & Recreational Analysis



- Legend**
- Perimeter shared path for pedestrian & bike
 - Community footpath
 - Informal footpath
 - Pedestrian linkage between lots
 - Parkland path
 - Gated Maintenance Access to Bio-basin
 - Emergency linkage
 - Community open space
 - Playground
 - Village green
Event lawn
 - Seating & rest





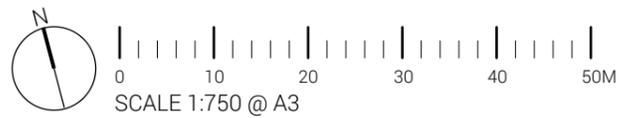
03

DETAIL DESIGN

3.1 Detail Plan 1 - Entrance

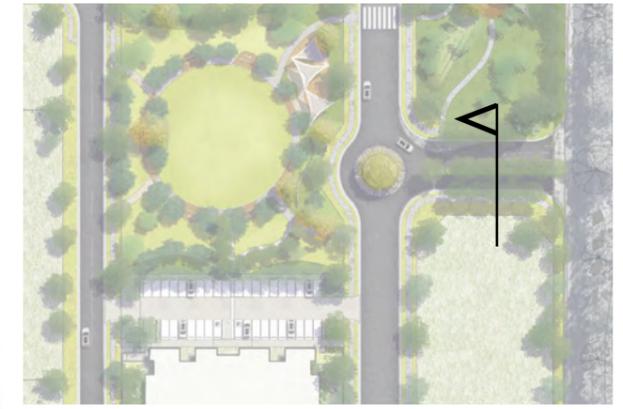


- 01 Planted entry with boulevard trees
- 02 Pedestrian crossing linking parks and lots
- 03 Central island with low level planting to maintain sightlines
- 04 Planted mounding to frame entry view
Opportunity for low level entry feature/ signage
- 05 Shared path for pedestrian & bike recreation
- 06 Shade tree and low planting in roundabout to maintain sightlines



3.2 Detail Plan 1 - Entrance Section

Note:
Refer engineering drawings for detailed information



Key Plan

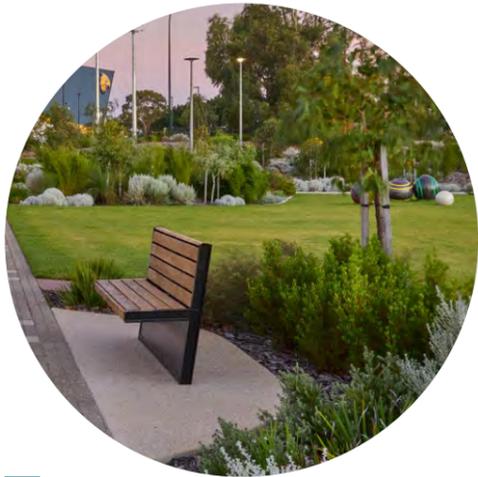
- 01** Buffer planting
- 02** Street tree in planter
- 03** Median with feature boulevard tree
- 04** Estate fence within lots



3.3 Detail Plan 2 - Village Green



01 Village green



02 Seating under feature trees



03 Playground
Under shade



04 Swings



05 Spinner Bowl / Carousel



06 Exercise Station



3.4 Detail Plan 3 - Entry Parkland



01 Parking to be provided to AS2890



02 Entry feature to entry corner



03 Grassed mounding



04 Shade over BBQ/ Rest Area



05 Community facility
Refer separate page



06 Opportunity for informal gathering area/
amphitheatre



3.5 Community Facilities Character Images

A central feature of the entry park design is the inclusion of a large open structure that can accommodate smaller individual groups as well as large community gatherings.

The structure will be open sided with fixed furniture, with roof enclosure that will provide shade and weather protection.

It will be designed to be a flexible space catering to the estate residents as well as the broader community beyond the site.



3.6 Detail Plan 4 - Southwest Bio basin



Landscape planning in this area should be to the requirements in accordance with the Planning for Bushfire Protection (2019 Appendix A section 4.1.1)

Gated maintenance access to bio-basin
Location TBC

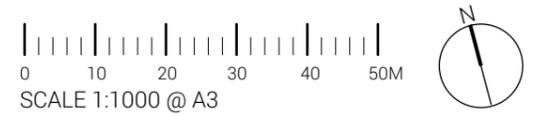
Perimeter path
Shared for pedestrian & bike recreation

Bio Basin

Planted batter

Austons Lane

4A Southwest park



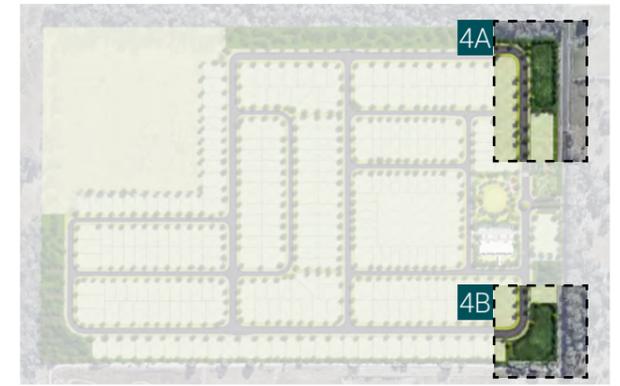
Key Plan

3.7 Detail Plans 5 - Eastern Bio basins



5A Northeast park

- Perimeter path in linear park
Shared for pedestrian & bike recreation
- Bio-basin
- Pool safety fence 1.2m to basin
- Gated maintenance access to bio-basin



Key Plan



- Pool safety fence 1.2m to basin
- Bio-basin
- Gated maintenance access to bio-basin
- Perimeter path in linear park
Shared for pedestrian & bike recreation
- Emergency access to Austons Lane
To Engr. dwg
- Buffer planting to James Creek Road
- Buffer planting to Austons Lane
- Existing trees to be retained



5B Southeast park

3.8 Bio Basin Character Images



01 Informal walking path



02 Bio Basin



03 Community lawn

3.9 Fences



- - - 1.8m High mesh fence to rural neighbouring properties
- - - Good neighbour fence to Auston's Lane
- - - Feature fence to James Creek Road
- - - Feature fence to childcare centre

3.10 Retaining Walls - Plan

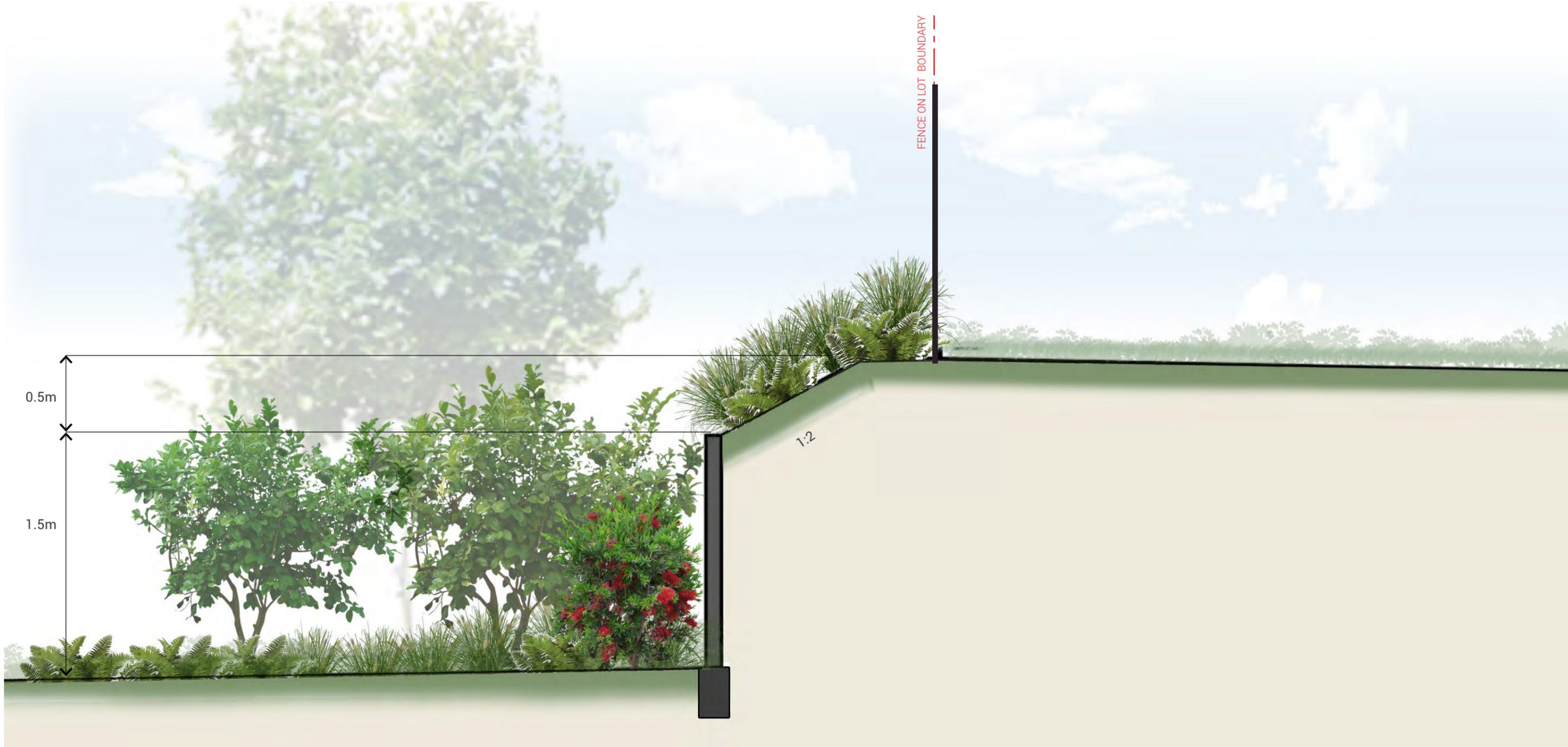


Maximum retaining locations within lots

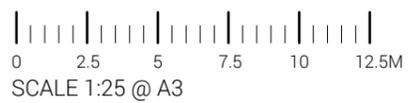
Refer typical section

3.11 Retaining Walls - Typical Section

Note:
Refer engineering drawings for detailed information



FALL TO THE ROAD FRONTAGE ← 1m 0.5m → FALL TO THE ROAD FRONTAGE



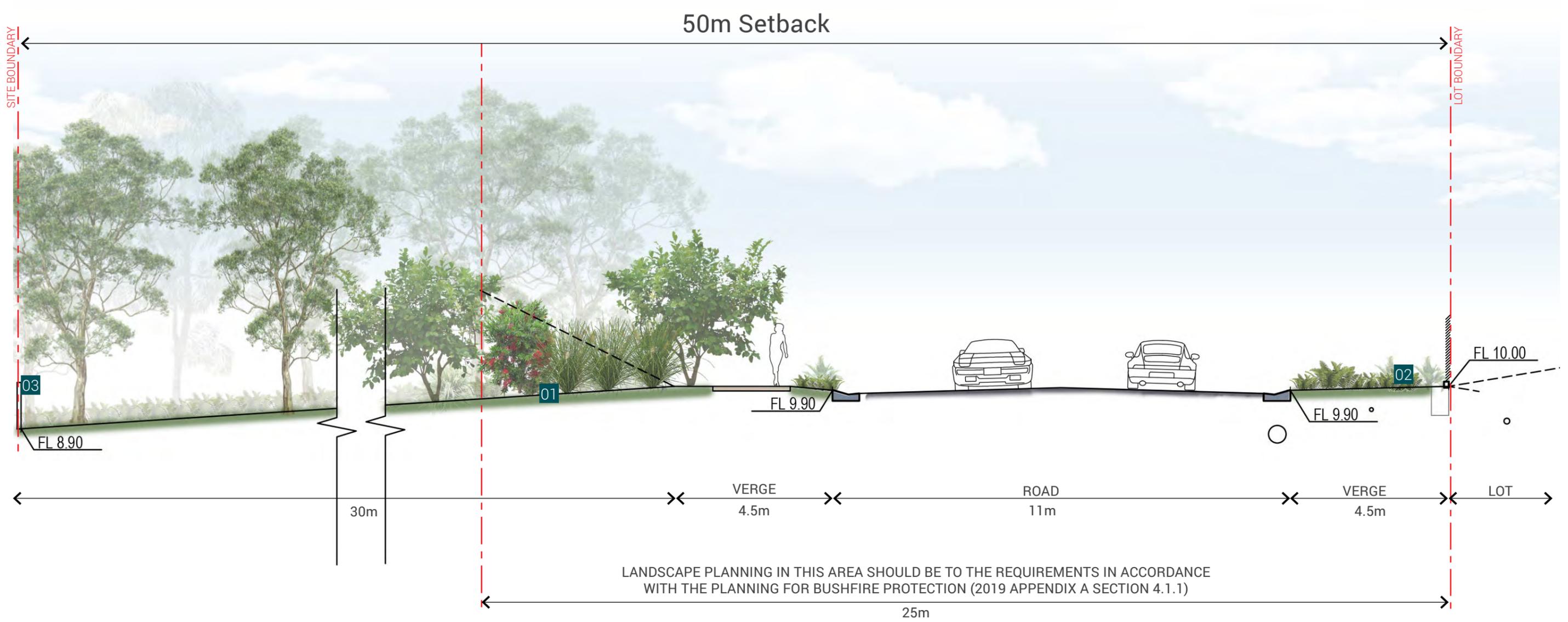


04

SECTIONS

4.1 Section 1 - Northern Boundary

Note:
Refer engineering drawings for detailed information



- 01 Batter into existing surface
- 02 Street tree and footpath
- 03 1.8m PVC coated chain mess fence to site boundary within planting

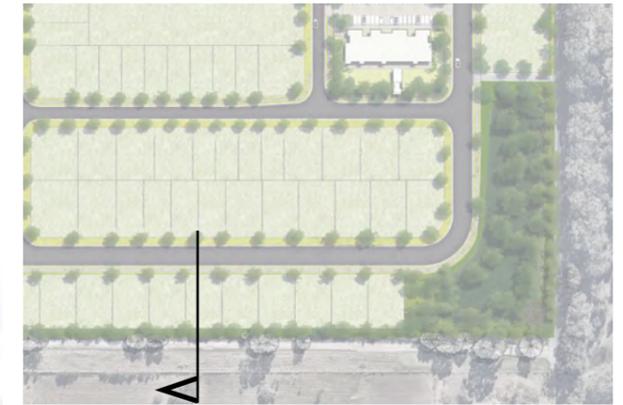
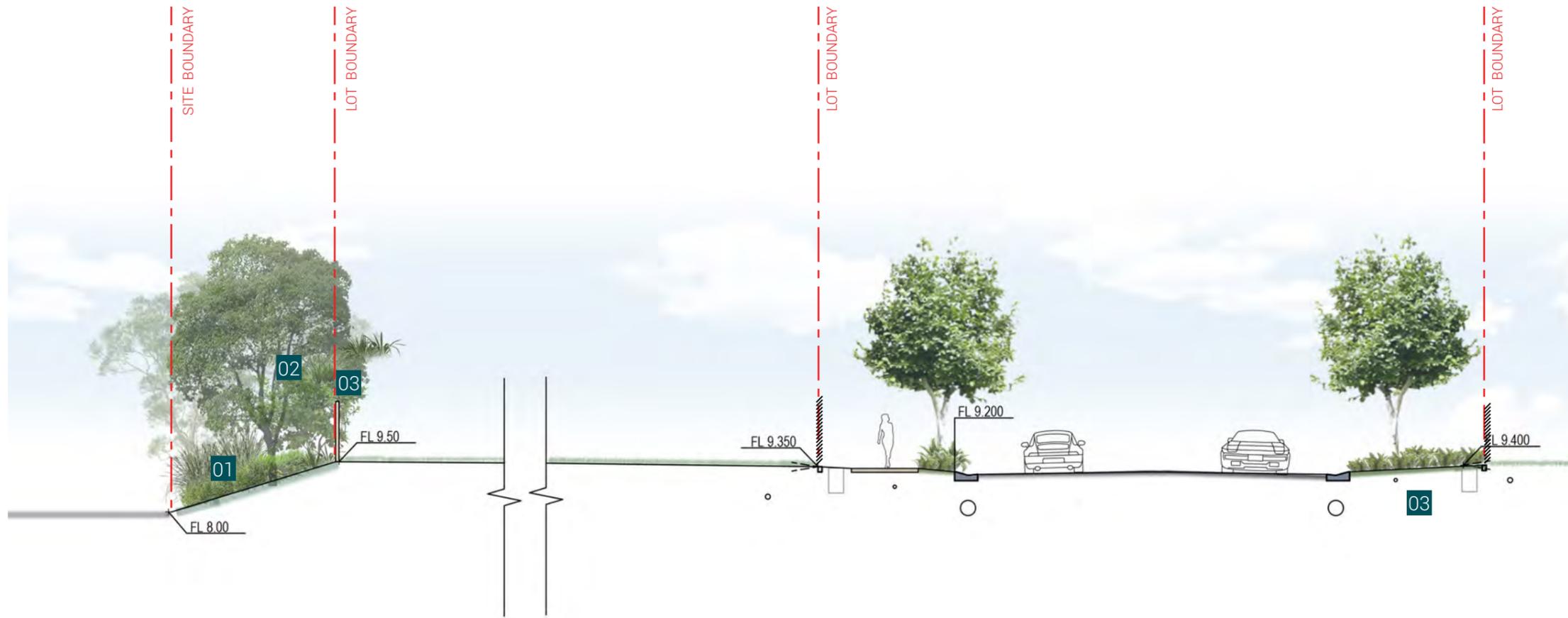


Key Plan



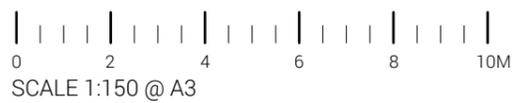
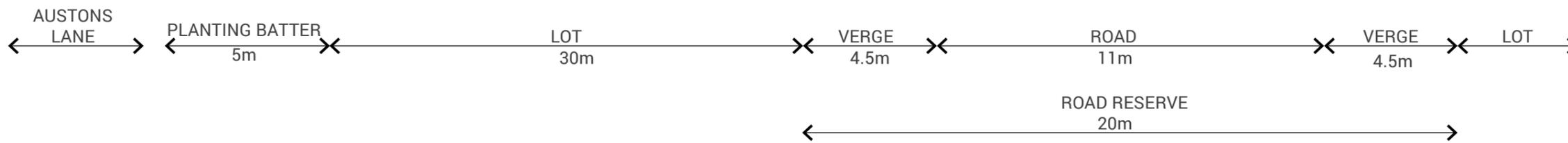
4.2 Section 2 - Southern Boundary

Note:
Refer engineering drawings for detailed information



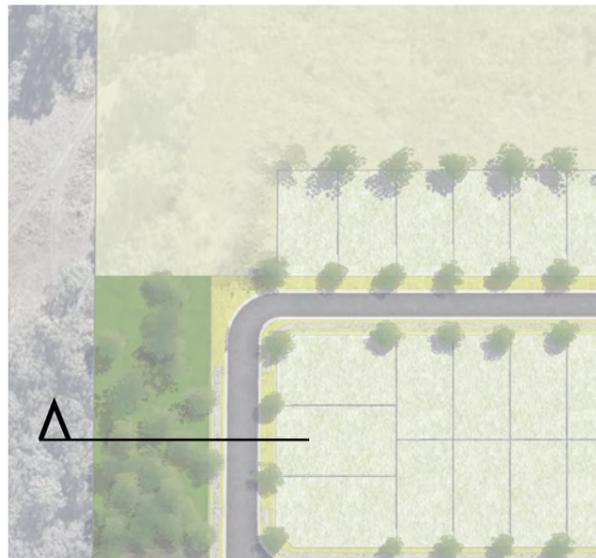
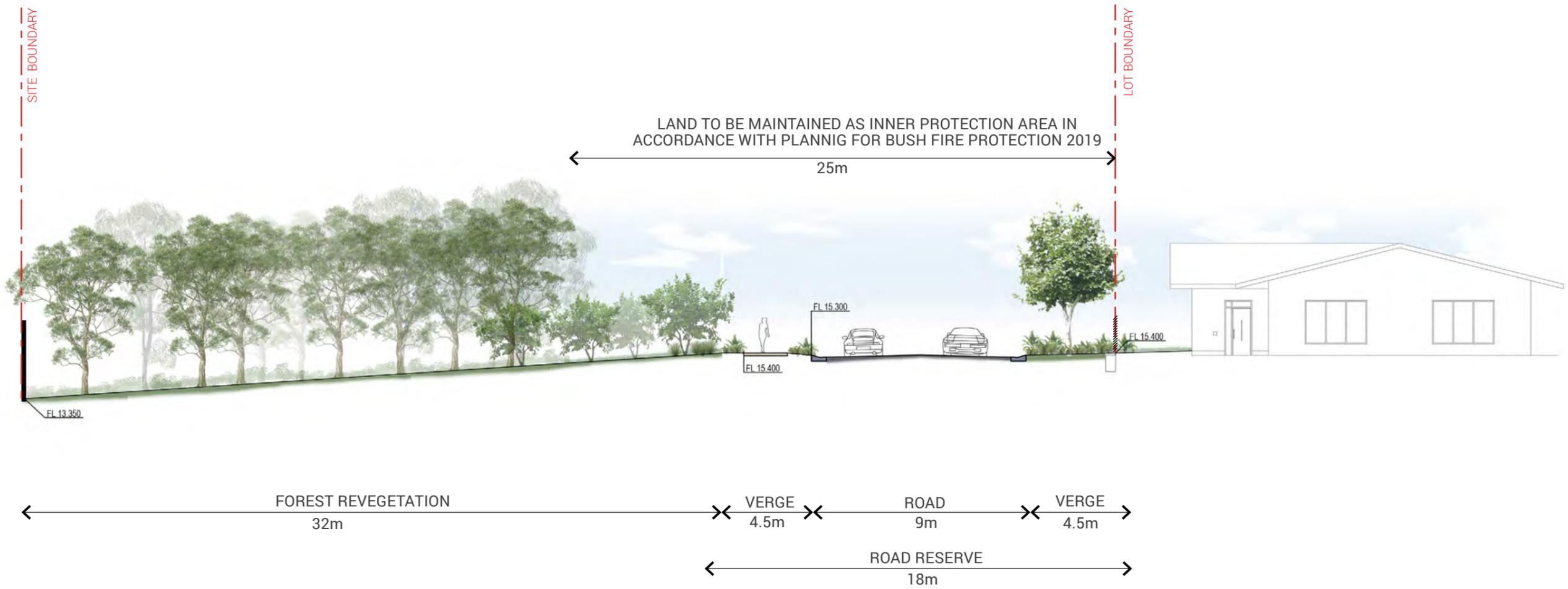
Key Plan

- 01 Batter to existing road with native planting species
- 02 Screening trees and layered planting
- 03 Good neighbour fence to lot boundary
- 04 Street tree and footpath



4.3 Section 3 - Western Boundary

Note:
Refer engineering drawings for detailed information

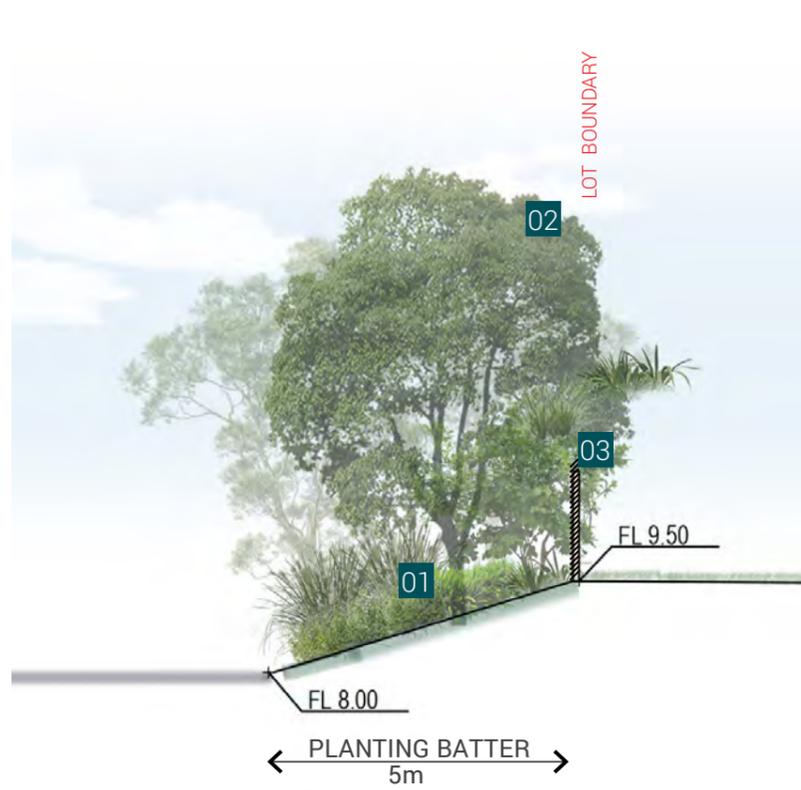


Key Plan



4.4 Planting Batter to Austons Lane & James Creek Road

Note:
Refer engineering drawings for detailed information



Section A - Planting Batter to Austons Lane

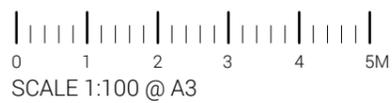


Elevation A - Planting Batter to Austons Lane



Section B - Planting Batter to James Creek Road

- 01 Planting batter with low maintenance native planting species
- 02 Screening tree
- 03 1.8m high open metal good neighbour fence
- 04 Existing trees to be retained
Individual treatment may be required





05

PLANTING

5.1 Planting Palette - Street

Botanical Name	Common Name
<i>Cupaniopsis anacardioides</i>	Tuckeroo
<i>Tristaniopsis laurina</i>	Kanooka Gum
<i>Waterhousea floribunda</i>	Weeping Lilly Pilly

TREES



Tristaniopsis laurina
Kanooka Gum



Waterhousea floribunda
Weeping Lilly Pilly



Cupaniopsis anacardioides
Tuckeroo

Botanical Name	Common Name
<i>Acmena smithii</i> 'Allyn Magic'	Allyn Magic
<i>Callistemon viminalis</i> 'little john'	Little John
<i>Crinum pedunculatum</i>	Swamp lily
<i>Dianella caerulea</i>	Blue Flax Lily
<i>Lomandra hystrix</i> 'Katie Belles'	Katie Belles
<i>Lomandra longifolia</i> 'Nyalla'	Nyalla
<i>Myoporum ellipticum</i>	Coastal Boobialla
<i>Syzygium australe</i>	Brush cherry
<i>Westringia hybrid</i> 'Blue Gem'	Blue Gem
<i>Westringia fruticosa</i> 'Mundi'	Mundi

SHRUB & GROUNDCOVER



Acmena smithii 'Allyn Magic'
Allyn Magic



Syzygium australe
Brush cherry



Callistemon viminalis 'little john'
Little John



Westringia fruticosa 'Mundi'
Mundi



Westringia hybrid 'Blue Gem'
Blue Gem



Dianella caerulea
Blue Flax Lily



Lomandra longifolia 'Nyalla'
Nyalla



Lomandra hystrix 'Katie Belles'
Katie Belles



Crinum pedunculatum
Swamp lily

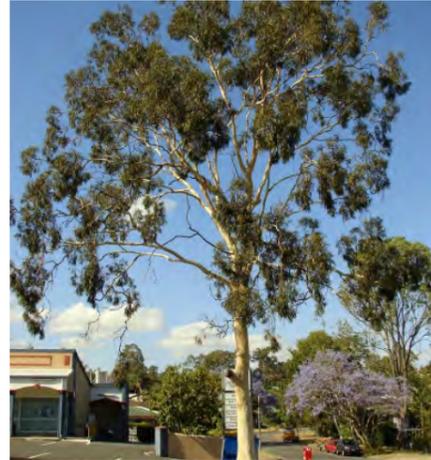


Myoporum ellipticum
Coastal Boobialla

5.2 Planting Palette - Park Trees

Botanical Name	Common Name
<i>Corymbia citriodora</i>	Spotted Gum
<i>Ficus brachypoda</i>	Edible fig
<i>Ficus microcarpa</i>	Indian Laurel Fig
<i>Leptospermum petersonii</i>	Lemon-scented Tea Tree
<i>Lophostemon confertus</i>	Queenland Brush Box
<i>Syzygium oleosum</i>	Blue Lilly Pilly
<i>Tristaniopsis laurina</i>	Kanooka Gum

TREES



Corymbia citriodora
Spotted Gum



Ficus brachypoda
Edible fig



Ficus microcarpa
Indian Laurel Fig



Tristaniopsis laurina
Kanooka Gum



Syzygium oleosum
Blue Lilly Pilly



Leptospermum petersonii
Lemon-scented Tea Tree



Lophostemon confertus
Queenland Brush Box

5.3 Planting Palette - Park Shrub & Groundcover

Botanical Name	Common Name
<i>Austromyrtus dulcis</i>	Midgen berry
<i>Banksia robur</i>	Swamp Banksia
<i>Callistemon viminalis</i> <i>'little john'</i>	Little John
<i>Hovea longifolia</i>	Hovea purple bush pea
<i>Leptospermum 'Pink Cascade'</i>	Pink Cascade
<i>Leptospermum polygalifolium</i>	Tea Tree
<i>Lomandra hystrix 'Katie Belles'</i>	Katie Belles
<i>Syzygium australe</i>	Brush cherry
<i>Westringia hybrid 'Blue Gem'</i>	Blue Gem

SHRUB & GROUNDCOVER



Syzygium australe
Brush cherry



Banksia robur
Swamp Banksia



Callistemon viminalis 'little john'
Little John



Lomandra hystrix 'Katie Belles'
Katie Belles



Westringia hybrid 'Blue Gem'
Blue Gem



Hovea longifolia
Hovea purple bush pea



Leptospermum polygalifolium
Tea Tree



Leptospermum 'Pink Cascade'
Pink Cascade



Austromyrtus dulcis
Midgen berry



Melaleuca linariifolia
Claret Tops

5.4 Planting Palette - Southern Batter to Austons Lane

Botanical Name	Common Name
<i>Eucalyptus populnea</i>	Poplar Box

TREES



Eucalyptus populnea
Poplar Box

Botanical Name	Common Name
<i>Grevillea rosemarinifolia</i> 'Crimson Villea'	Crimson Villea
<i>Lomandra fluviatilis</i> 'Shara'	Shara
<i>Lomandra labill</i> 'Evergreen Baby'	Evergreen Baby
<i>Lomandra multiflora</i> 'Filly Lace'	Filly Lace
<i>Pennisetum alopecuroides</i> Common	Swamp Foxtail Grass
<i>Poa labillardieri</i>	Common Tussock-grass

SHRUB & GROUND COVER



Grevillea rosemarinifolia 'Crimson Villea'
Crimson Villea



Poa labillardieri
Common Tussock-grass



Pennisetum alopecuroides
Common Swamp Foxtail Grass



Lomandra fluviatilis 'Shara'
Shara



Lomandra labill 'Evergreen Baby'
Evergreen Baby



Lomandra multiflora 'Filly Lace'
Filly Lace



Grevillea
'Bronze Rambler'

5.5 Planting Palette - Bio Basin

Botanical Name	Common Name	TREES
<i>Melaleuca linariifolia</i>	Paperbark	



Melaleuca linariifolia
Paperbark

Botanical Name	Common Name	SHRUB & GROUND COVER
<i>Baloskion tetraphyllum</i>	tassel rope-rush	
<i>Dianella longifolia var longifolia</i>	Pale Flax-lily	
<i>Lomandra hystrix 'Katie Belles'</i>	Katie Belles	
<i>Lomandra longifolia 'Katrinus Deluxe'</i>	Katrinus Deluxe	
<i>Pennisetum alopecuroides 'Purple Lea'</i>	Purple Lea	
<i>Lomandra fluviatilis 'Shara'</i>	Shara	
<i>Banksia robur</i>	Swamp Banksia	
<i>Carex appressa</i>	Tall Sedge	
<i>Carex fascicularis</i>	Tassel Sedge	
<i>Ficinia nodosa</i>	Knobby Club Rush	



Baloskion tetraphyllum
tassel rope-rush



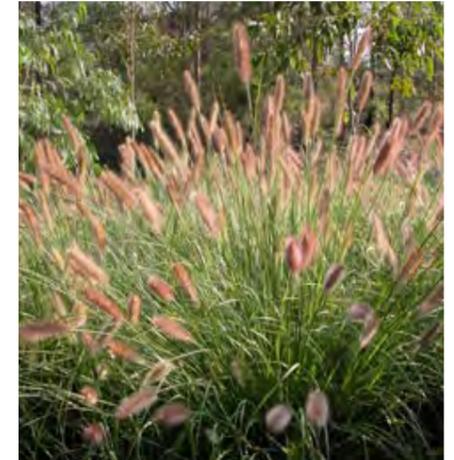
Dianella longifolia var longifolia
Pale Flax-lily



Lomandra hystrix 'Katie Belles'
Katie Belles



Lomandra longifolia 'Katrinus Deluxe'
Katrinus Deluxe



Pennisetum alopecuroides 'Purple Lea'
Purple Lea



Lomandra fluviatilis 'Shara'
Shara



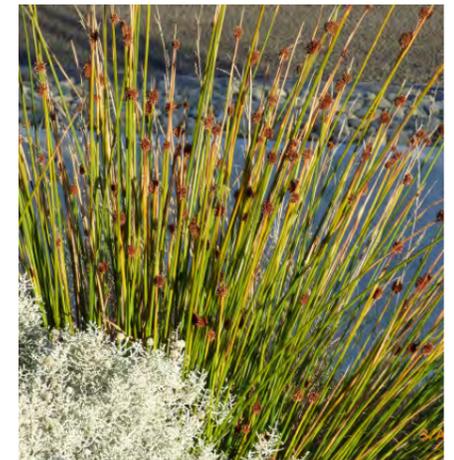
Banksia robur
Swamp Banksia



Carex appressa
Tall Sedge



Carex fascicularis
Tassel Sedge



Ficinia nodosa
Knobby Club Rush

5.6 Planting Palette - Bushfire Protection Zone Trees

Botanical Name	Common Name
<i>Acacia decurrens</i>	Black Wattle
<i>Brachychiton populneus</i>	Kurrajong
<i>Corymbia maculata</i>	Spotted gum
<i>Cupaniopsis anacardioides</i>	Tuckeroo
<i>Elaeocarpus eumundi</i>	Eumundi quandong
<i>Fraxinus griffithii</i>	Griffith's Ash
<i>Gleditsia triacanthos 'Sunburst'</i>	Sunburst Honeylocust
<i>Lagerstroemia indica</i>	Crepe myrtle
<i>Magnolia grandiflora 'Teddy bear'</i>	Bull Bay Magnolia

TREES



Acacia decurrens
Black Wattle



Brachychiton populneus
Kurrajong



Corymbia citriodora
Spotted Gum



Cupaniopsis anacardioides
Tuckeroo



Elaeocarpus eumundi
Eumundi quandong



Fraxinus griffithii
Griffith's Ash



Gleditsia triacanthos 'Sunburst'
Sunburst Honeylocust



Lagerstroemia indica
Crepe myrtle



Magnolia grandiflora 'Teddy bear'
Bull Bay Magnolia

5.7 Planting Palette - Bushfire Protection Zone Shrub & Groundcover

Botanical Name	Common Name
<i>Acacia acinacea</i>	Gold Dust Wattle
<i>Carpobrotus glaucescens</i> 'Aussie rambler'	Pigface
<i>Casuarina glauca</i> 'Freefall'	Groundcover sheoak
<i>Liriope muscari</i> 'Evergreen Giant'	Lilyturf
<i>Lomandra longifolia</i> 'Nyalla'	Spiny Headed Mat Rush
<i>Leptospermum polygalifolium</i>	Tea Tree
<i>Lomandra hystrix</i> 'Katie Belles'	Katie Belles
<i>Lomandra longifolia</i> 'Katrinus deluxe'	Spiny Headed Mat Rush
<i>Myoporum parvifolium</i>	Creeping boobiella
<i>Syzygium australe</i>	Lilly Pilly

SHRUB & GROUNDCOVER



Acacia acinacea
Gold Dust Wattle



Carpobrotus glaucescens 'Aussie rambler'
Pigface



Casuarina glauca 'Freefall'
Groundcover sheoak



Liriope muscari 'Evergreen Giant'
Lilyturf



Lomandra longifolia 'Nyalla'
Spiny Headed Mat Rush



Leptospermum polygalifolium
Tea Tree



Lomandra hystrix 'Katie Belles'
Katie Belles



Lomandra longifolia 'Katrinus deluxe'
Spiny Headed Mat Rush



Myoporum parvifolium
Creeping boobiella



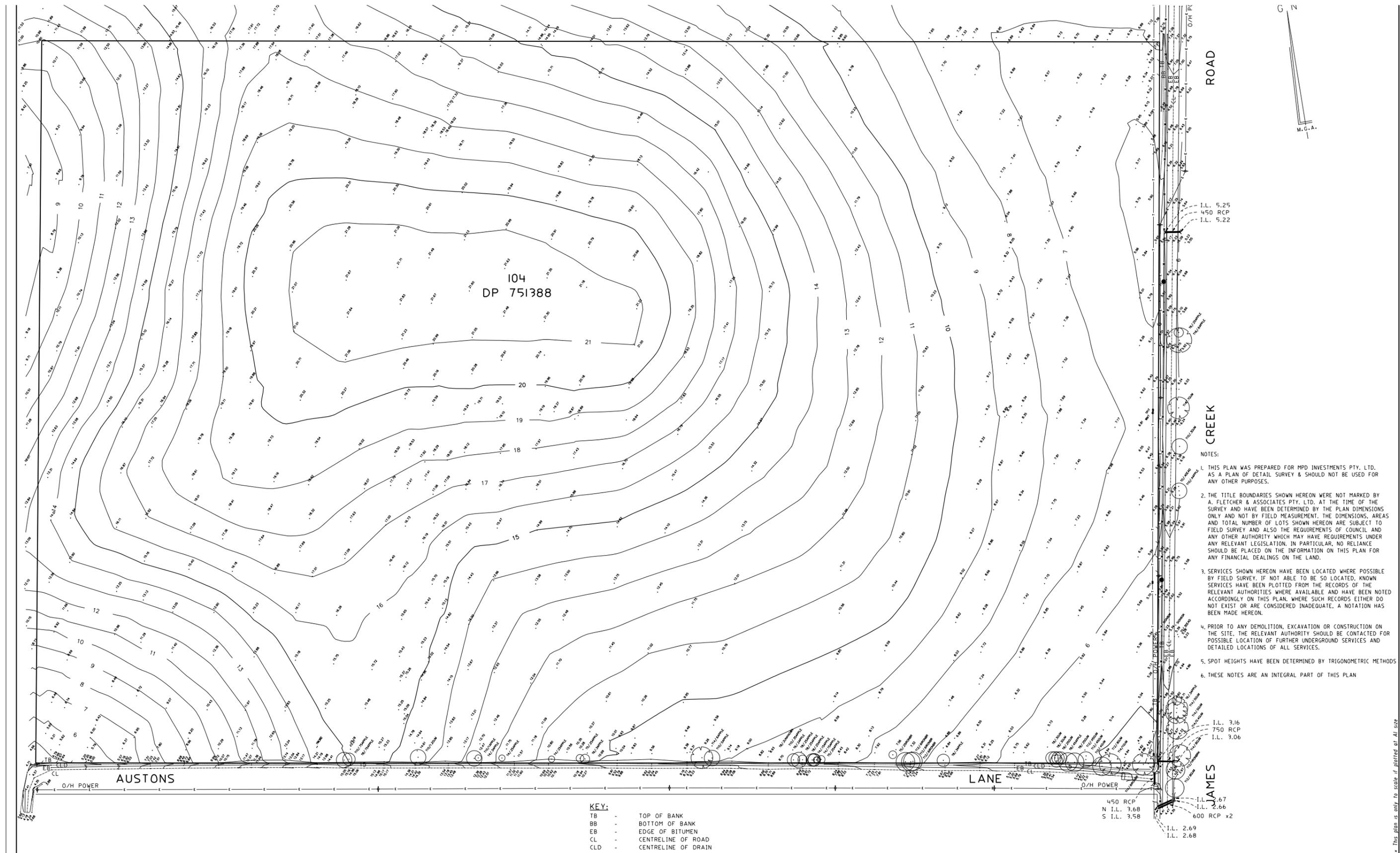
Syzygium australe
Lilly Pilly



06

APPENDIX

6.1 Site Survey



ROAD

CREEK

NOTES:

1. THIS PLAN WAS PREPARED FOR MPD INVESTMENTS PTY. LTD. AS A PLAN OF DETAIL SURVEY & SHOULD NOT BE USED FOR ANY OTHER PURPOSES.
2. THE TITLE BOUNDARIES SHOWN HEREON WERE NOT MARKED BY A. FLETCHER & ASSOCIATES PTY. LTD. AT THE TIME OF THE SURVEY AND HAVE BEEN DETERMINED BY THE PLAN DIMENSIONS ONLY AND NOT BY FIELD MEASUREMENT. THE DIMENSIONS, AREAS AND TOTAL NUMBER OF LOTS SHOWN HEREON ARE SUBJECT TO FIELD SURVEY AND ALSO THE REQUIREMENTS OF COUNCIL AND ANY OTHER AUTHORITY WHICH MAY HAVE REQUIREMENTS UNDER ANY RELEVANT LEGISLATION. IN PARTICULAR, NO RELIANCE SHOULD BE PLACED ON THE INFORMATION ON THIS PLAN FOR ANY FINANCIAL DEALINGS ON THE LAND.
3. SERVICES SHOWN HEREON HAVE BEEN LOCATED WHERE POSSIBLE BY FIELD SURVEY. IF NOT ABLE TO BE SO LOCATED, KNOWN SERVICES HAVE BEEN PLOTTED FROM THE RECORDS OF THE RELEVANT AUTHORITIES WHERE AVAILABLE AND HAVE BEEN NOTED ACCORDINGLY ON THIS PLAN. WHERE SUCH RECORDS EITHER DO NOT EXIST OR ARE CONSIDERED INADEQUATE, A NOTATION HAS BEEN MADE HEREON.
4. PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION ON THE SITE, THE RELEVANT AUTHORITY SHOULD BE CONTACTED FOR POSSIBLE LOCATION OF FURTHER UNDERGROUND SERVICES AND DETAILED LOCATIONS OF ALL SERVICES.
5. SPOT HEIGHTS HAVE BEEN DETERMINED BY TRIGONOMETRIC METHODS
6. THESE NOTES ARE AN INTEGRAL PART OF THIS PLAN

KEY:
 TB - TOP OF BANK
 BB - BOTTOM OF BANK
 EB - EDGE OF BITUMEN
 CL - CENTRELINE OF ROAD
 CLD - CENTRELINE OF DRAIN

KEY - TOPOGRAPHICAL		EXISTING		KEY OF COMMON SERVICES DESIGN	
Property Boundary	---	LOUPLINE	POWER	ELECTRICITY	— —
Top Bank	— —	ELEVATED JOINT	TELSTRA	TELSTRA	— —
Bot. Bank	— —	JUNCTION	SEWER	SEWER	— —
Fence	— —	HYDRANT WATER METER	WATER	WATER	— —
Permanent Survey Mark	□	STOP VALVE	DRAINAGE	DRAINAGE	— —
Bench Mark	△	INTERLOT DRAINAGE			— —
Survey Mark	△				

Rev.	Date	Drn.	Chk.	Description

A. FLETCHER & ASSOCIATES
 Land and Engineering Surveyors
 Development Consultants
 86 Victoria Street, P.O. Box 1213, Grafton, 2460
 Ph: (02) 6642 3300, Fax: (02) 6642 5990
 Email: a.fletcher@afletch.com.au

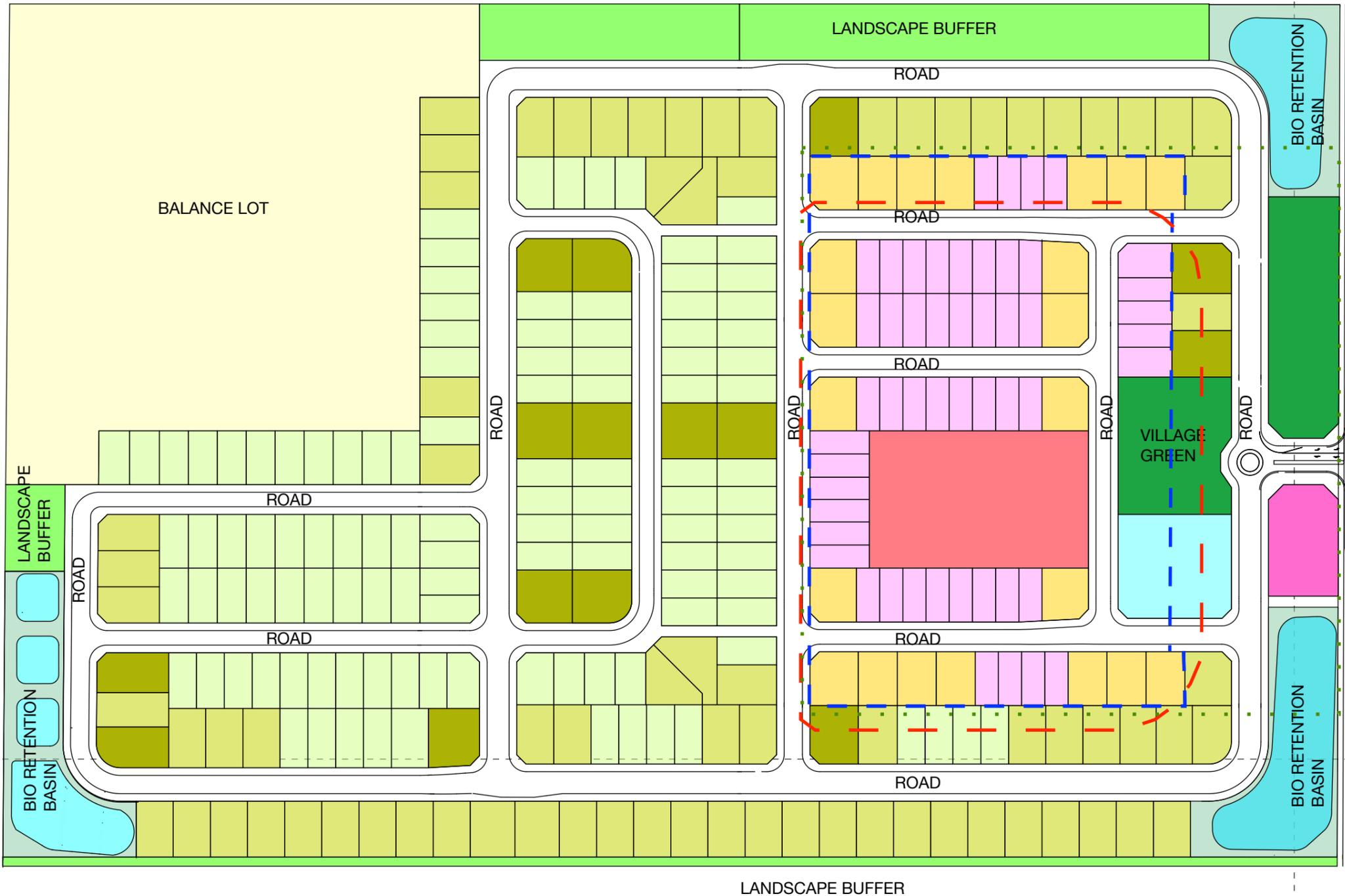
DETAIL SURVEY OVER LOT 104 DP 171388 JAMES CREEK RD, JAMES CREEK.
 CLIENT: MPD INVESTMENTS PTY. LTD.

SURVEY: RT	DRAWING No. 9738 DET
DESIGN: CHKD	ORIGIN: PMI20125
DRAWN: RT	8.676 AHD
DATE: 3/05/22	C.I. 1.0m
SCALE: 1:125	
CAD REFERENCE: Z:\9738\VDGN\9738DET.DGN	Revision:

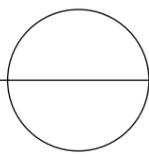


place
design
group.

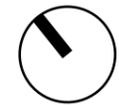
Attachment 4 – Updated Master Plan



LEGEND		LOTS	YIELD
RESIDENTIAL R1 ZONE AREA- LOTS			
	RESIDENTIAL >450M2	113	113
	RESIDENTIAL >600M2	78	78
	RESIDENTIAL >800M2 DUPLEX	15	30
		206	221
RESIDENTIAL R3 ZONE AREA- LOTS			
	RESIDENTIAL >350M2	51	51
	RESIDENTIAL >600M2 DUPLEX	22	44
	RESIDENTIAL MULTI DWELLING	01	38
		74	133
	TOTAL	280	354
OTHER			
	PUBLIC OPEN SPACE-PARK- MIN 9264M2		
	COMMERCIAL- 2194 M2 APPROX		
	CHILD CARE- 3391M2 APPROX		
	BALANCE LOT- 56300 M2 APPROX (Yellow shade)		
	LANDSCAPE BUFFER		
	BIO RETENTION BASIN AREA		
BOUNDARY			
	EXISTING R3 ZONING BOUNDARY LOCATION		
	PROPOSED R3 ZONING BOUNDARY LOCATION		
	the village @James creek		
R3 ZONE AREA EXISTING APPROX 61000M2 (NOTIONAL)			



PLAN- UPDATED CONCEPT MASTER PLAN- the village @ James creek
 SCALE- 1:2500 AT A3



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		AMENDMENT: Issue G 14 MAY 24	MPD INVESTMENTS PTY LTD	OCT 23	
			PROJECT: The village @ James creek	SCALE: 1:2500	
			TITLE: CONCEPT MASTER PLAN	ISSUE: G	
				DRAWING NO: 7	

Attachment 5 – Imagery



perspective view of entry
 (commercial site to future detail shown
 dotted) Bird's eye view

Disclaimer: The particulars are set out as a general outline only.
 This representation is intended as a guidance for intending
 purchaser(s) and does not constitute an offer or contract. Intending purchaser(s)
 should satisfy themselves by inspection or otherwise as to the correctness of each
 description or reference.



the village
 @ james
 creek

james creek road 2463 nsw
 MPD Investments Pty Ltd

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perspective view of entry
pedestrian I

Disclaimer: The particulars are set out as a general outline only. This representation is intended as a guidance for intending purchaser(s) and does not constitute an offer or contract. Intending purchaser(s) should satisfy themselves by inspection or otherwise as to the correctness of each description or reference.



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